

Infant mortality: a Turkish puzzle?



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Abstract

In this paper I examine the problem of high infant and child mortality in Turkey. In view of my research results, I argue for a re-evaluation of the theoretical paradigm that views childhood issues primarily in relation to mothers rather than within the dynamics of a broader cultural context. The present emphasis on mothers as a primary key to the problem reflects an extensive and implicit conceptualization of 'motherhood' that has penetrated scientific discourse and methodology. The research results presented here show that in our Istanbul sample most of the factors related to high child mortality are household and cultural conditions encircling the mother, and that only a few of the factors are direct attributes of the mother herself. These results have significant implications for research and policy on child health.

The research problem: Turkey's unexpectedly high infant and child mortality rates

In Turkey, as in most Middle Eastern countries, neither the GNP per capita nor other criteria of development seem to explain the high incidence of infant deaths. Countries with a mortality rate for adults and children over age five similar to that of Turkey have a much lower infant mortality rate (Adlakha 1970:31,56,181). The causes of the particularly high infant and child mortality rates in Turkey relative to mortality at older ages remain unexplained. It is not clear whether they are due to certain child-specific diseases or health conditions that uniquely affect Turkey, or malnutrition, or whether the health-care practices that exist for adults do not exist to the same extent and effectiveness for infants and children (Shorter and Macura 1983:21). Aksit and Aksit comment that

We are aware that the historical relationship between income and mortality during economic development can be highly variable, yet it is puzzling that Sri Lanka with one-third of the Turkish per capita GNP has half the Turkish infant mortality (Aksit and Aksit 1989:571).

Similarly, Tuncbilek (1989:3) considers infant mortality to be one of Turkey's major problems, particularly given the contradiction with other socioeconomic and demographic variables.

Research on the social determinants of infant mortality rates

Research on infant and child deaths in developing and developed countries has generally concentrated on intermediate variables affecting child health through their medical-physiological effects. Studies have been carried out to measure the effects of nutrition, of breastfeeding and of morbidity (Brown 1984; Hoffman and Lamphere 1984; Martorell and Ho 1984; Tezcan 1985). The role of respiratory and intestinal diseases and infectious illnesses has been examined (Foster and Anderson 1978; Black 1984; Bradley and Keymer 1984).

Socioeconomic environmental factors and level of technology have also been the focus of study. Generally, a positive and significant relationship has been found between the total number of pregnancies a woman has had, the total number of her children, the number of members of the household, and infant mortality. A negative and significant relationship has also been found between the amount of schooling the mother and father have had, the level of family income, and infant mortality (Adlakha 1970; Briscoe 1984; Schultz 1984; Ware 1984; Tuncbilek and Ulusoy 1988). Scientists often try to explain mortality by stating the existence of a relationship between mortality figures and selected socioeconomic variables such as these. The manner in which these variables affect mortality and the way they are interconnected with cultural practices, national and global policies and ideologies, however, are left unexplained (Mosley 1984:25, Scheper-Hughes 1985).

Mosley and Chen (1984) have proposed a framework for research on child survival which shows how the causal linkages can be traced back from death to health status, thence to a variety of intermediary factors, and finally to a layer of determinants which they place in one category called 'socioeconomic'. It has been remarked that, even though they have received a great deal of research attention, the socioeconomic determinants remain a black box to this day (Mosley and Chen 1984; Shorter 1987:1).

The conditions beyond the material and environmental have emerged as important research issues (Caldwell 1986; UNDP 1991). Scheper-Hughes (1985) touched upon the same question in her research in a Brazilian shanty-town in 1982, pointing out that

the so-called Brazilian Economic Miracle [which is] a policy of capital accumulation ... has increased ... the Gross National Product [but] childhood mortality rate has been steadily rising throughout the nation since the late 1960s.

Indeed, political-party leaders advocated free distribution of children's coffins in the district as election propaganda (Scheper-Hughes 1985:292).

While infant mortality rate seems to be a simple health statistic that reflects material culture and environmental conditions, it is also a silent but meaningful indicator of a country's (or community's) life-style, of the value given to different generations, age-groups and genders, and of many unspoken balances of power in that culture.

The research focus

With the above considerations in mind, my research was aimed at the specific problem of identifying cultural practices and conditions that may be reasons for the higher than expected infant mortality rate in Turkey. I wanted to study both the implications of national policies and the local cultural factors operating together to determine child health in Turkey.

Furthermore, through intensive in-depth interviews and observations of women with different child-mortality experiences, I hoped to identify the family circumstances, proximate kin and cultural factors that lead to infant deaths. I wanted to see how national policies reflect on local conditions and family life and how these circumstances in turn influence child care and health.

'Gş• kent': the research area in Istanbul

In view of the rapid and increasing urbanization in the country, I chose an area that would be representative of this trend. Within the selected area, which has a low-income population, I adopted a multivariate approach for a more refined measure of mortality experience.

The area of Gş• kent (a pseudonym) was chosen as the location of research because it had received migrants from nearly all parts of Turkey for the past 20–25 years. It was assumed to be similar in many

respects to some of the more recently settled *gecekondu*¹ areas of Istanbul, and also to be illustrative of differentials within Turkey. As a whole migrants are a select group from their home regions and not a pure cross-section of the country, but nevertheless, I expected to obtain strong clues as to what is causing the unexpectedly high child mortality in Turkey. Gş• kent is situated in a densely populated area of Asian Istanbul. It is inhabited by about 200,000 people, nearly all of whom are rural migrants who came to Istanbul from Central and Eastern Turkey and the Black Sea Coast, including a small group of gypsies.

The household survey and the subsequent in-depth interviewing took place in a particular district within the official boundaries of the *muhtarlık* (local headman's jurisdiction), constituting about 28-30,000 inhabitants within the larger Gş• kent suburb. This district has a main road with a number of grocer's shops, markets, a few butchers, many furniture, electrical-goods and kitchenware shops, construction-material and carpentry shops, barbers, clothing and shoe shops, and a large number of private doctors' surgeries and pharmacies. The presence of shops selling things like furniture and electrical goods points to the presence of a consumer market in the district. Within the boundaries of the district there are three mosques, about 20 men's coffee houses, and several beer shops or billiard halls (which are also local social and business centres), and a physical activity centre for men. During the research, one apartment in the district was converted into a mosque, bringing the total number of mosques to four.

Research methodology

Sampling

The primary research methodology was to carry out in-depth interviewing and observation-based research for a limited number of households. However, I also wanted to be able to generalize the findings for the community involved and to be able to present these numerically. Therefore, I chose a combination of methods that would allow me both to have a rich personal historical insight into the micro worlds and daily lives of individual women and their families, and also that would enable me to quantify these findings. Rather than simply conducting a classic ethnographic study where households or individuals are selected purposively (according to various criteria) in small numbers, I began by conducting a representative sample survey in Gş• kent.

The sample of 1025 households was distributed over nine streets that were randomly selected from the municipality plan. The suburb is characterized by adjacent buildings or flats where tenants and landlords, who represent different economic and migration patterns, live next door to each other. Therefore, in selecting my sample of households I chose a small but complete area and investigated every individual dwelling, rather than using a random sample of dwellings over a wider area; thus, I aimed to include all the different types of dwellers on those streets. Information was collected from nearly all the dwellings on these streets.²

In this survey, carried out in November and December 1986, respondents were asked the number of inhabitants, their ages and dates of birth, how they were related to each other, and whether any

¹ The massive rural exodus of a large part of Turkey's population has led to a form of settlement in cities which is described as *gecekondu*, which literally means 'coached overnight'; the term refers to the quick, unplanned and often illegal nature of these settlements which are populated mostly by members of the urban working class and by the unemployed and underemployed.

² Those houses where no respondents could be found were visited twice more in an attempt to get full coverage of the sample streets. The questionnaires were administered by myself and seven research assistants.

women were then pregnant. Secondly, they were asked whether anyone had died the previous year, and, if so, their age and the cause and date of death.³

Results of the preliminary 1986 survey: 1025 households

The preliminary survey showed that most of the demographic patterns in Gş• kent were similar to those found in other parts of Turkey, so long as we look at broad features only. Household size showed a mean of 4.7 persons, age distribution was about 50 per cent under age 20, sex ratios were normal.

The same is true of household composition: 71 per cent of households were nuclear families composed of husband, wife, usually children and sometimes semi-permanent guests. Some sets of nuclear families living in the same apartment block might in fact be classified as semi-extended families, where a nuclear family resides in the same building with other related groups eating most of their meals together, spending time together, and going to their individual apartments only to sleep. Some of these families have been classified as 'extended families', depending on how the respondent actually described and named her type of family. Some researchers have distinguished 'temporary' from 'permanent' extended families, depending on who is the breadwinner in the household. In our survey however, the extended-family household is defined as a household unit consisting of at least two generations of adults, sharing housing and pooling resources for basic household expenditures.

The traditional patriarchal model of the extended family household consists of the father, mother, son, son's wife and children. This form of family unit undergoes various permutations according to the life-cycles of its members (Timur 1981:117-132). Thus, in the survey sample, a total of 21 per cent of the households are patrilineal extended families, three per cent are extended families where the wife's relatives are present, three per cent are broken homes, and one per cent are inhabited by single dwellers (seven middle-aged men and five women live alone). In three households, the husband is a polygynist with two wives present in the same household.

As regards infant mortality rates, however, Gş• kent had a higher rate than did Istanbul, and Turkey as a whole. This conclusion is reached by noting that there were 16 deaths among the 164 babies born during the year before the survey. Nearly half of these 16 babies died before completing their first month. A simple ratio of deaths to births (97 per thousand) would minimize the infant mortality rate because we could not follow every birth for a full year after it took place, thus missing some deaths. At a maximum, the rate might be as high as 148 per thousand, using the indirect method of estimating from the proportion surviving, which takes into account this unobserved risk period. For the city, or more precisely, for the province which is almost the same, the estimated infant mortality rate for the same time was approximately 79 per thousand, and for Turkey 90 per thousand (Shorter 1989a).

From these preliminary results, it was clear that Gş• kent had poorer-than-average child health, compared to both national and Istanbul statistics. This was to be expected since our sample included some particularly poor migrant families.⁴

³ I am aware of the difficulties and the mistakes involved in capturing accurate information by the one-year time period questions (Shorter 1989a:21-26). However, we had the advantage of good interviewing and careful administration of the questionnaire (see also Blacker and Brass 1979).

⁴ Variations in infant and child mortality can be expected not only within a country, but also between social classes in a city. Shorter remarks that differences internal to urban society are themselves remarkably great. According to the 1976 census, infant mortality rates for Damascus were 83.7 for the lower class and 34.4 per thousand for the upper class (Shorter and Zurayk 1985:67). Again, when Batani looked at child mortality in Cairo governorate, differentiating between groups of mothers on the basis of their education, her results showed that the lowest social class suffered child mortality risks three times as great as the highest class: 50.7 per thousand to 141 per thousand (Shorter 1989b:14,15).

As infant mortality is also indicative of other problems of early childhood, the subsequent in-depth questionnaire was not limited to questions about infancy alone, but at the next stage of the research detailed questions were asked about all children born and their survival or death early in life.

In-depth interviews

In order to gain insight into cultural issues along with precise and comparable data for all the families, I took a subsample of the original 1025 households. This one-in-four sample was selected by taking every fourth household in our original sample list. Before making the systematic selection, I enriched the selection in favour of families with recent infant mortality by selecting all the women who had an infant death during the last year (N=16). The one-in-four selection was done without removing the 16. The purpose was to be sure to have enough representation of mortality as well as survival to be able to study the variation.

For this purpose, one woman was selected in each household giving priority to (1) a woman under 45 who had children; (2) or, if there were no such woman, then a woman older than 45 with children; (3) or a woman married or single with no children. In this way, we interviewed a total of 251 women. For statistical analysis of the factors associated with child mortality, we excluded the women (married or single) who had no births. For the present analyses, I selected the 229 women who were married, widowed or separated and who had at least one birth.

To sort out the observation-based, anecdotal and ethnographic material, I decided to take into consideration the major methodological issue of taking into account the risk of death for different ages of children.⁵ In the final analysis, to be able to capture the different degrees of experiencing child mortality when comparing the women in our sample, I used Preston’s method of proportion dead among children ever born by the marital duration of the women (see Farah and Preston 1982).

The proportion of dead children for each woman is compared with the mortality level of all women with the same marital duration in this population. Thus, for each woman, there is an expected proportion of dead children for her own group of marital durations. The ratio between her actual proportion of dead children and the expected proportion dead gives an indication of her specific individual situation, showing whether her child mortality is better or worse than expected given her marital durations. Marital duration is an indicator here of how long ago her children were born (see Table 1).

The proportions dead shown in Table 1 are the average experience of the mothers by marital groups. Following Preston, I consider the mean proportion dead to be the expected values for an ‘average’ woman. In this way I construct a simple index: Actual PD/Expected PD. The results range from 0 for a woman with no dead children to as high as 10.4 in the most severe cases in the sample. This is called the child mortality index (CMI) for each woman (see Table 2).⁶

Table 1
Mean proportion dead of children by marital duration groups of mothers

Marital duration (years)	Total CEB*	Total dead	Mean proportion dead	Cases
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⁵ The likelihood of a child’s having died is highly dependent on how long ago the child was born. This is the risk of death that causes more deaths to be recorded as a group of children get older. Our women were not all ‘equal’ in this respect.

⁶ My method is similar to, but not a strict application of, the more complex methodology used by Farah and Preston (1982) and is suitable for a small study.

0-4	52	5	.0962	38
5-9	157	21	.1338	64
10-14	181	32	.1768	49
15-19	144	30	.2083	31
20-24	106	22	.2075	21
25+	142	41	.2887	26
Entire population	782	151	.1931	229

*CEB: Children ever born⁷

⁷ Table 1 implies lower infant and child mortality than was measured earlier in the paper using infant deaths only for the last year and births only for the last year. Both items were collected in the larger sample. When an indirect estimate is calculated using the Brass-Trussell method (United Nations 1983:81-85), the estimate of the infant mortality rate is approximately 112 per thousand (durations of marriage less than 15 years and the East model).

Table 2
Child Mortality Index

Index	Frequency
0.0	127
0.49–1.00	21
1.01–1.50	35
1.51–2.00	18
2.01–5.00	24
10.4	4
Total	229

Exploring the relevance of cultural factors

Detailed information (over 500 separate variables) was collected from each woman during the in-depth interviews.⁸ After initially searching for associations of single variables with child mortality as measured by the child-mortality index (CMI), I condensed the voluminous data into several compound variables, each of which expresses a particular concept. Frequency distributions of the results for some selected compounds in summary, together with simple correlations (one-variable) with the index CMI, are shown in Table 3.

Table 3
Correlations of compound variables with Child Mortality Index

Compound variable	Correlation coefficient	Significance (p)
Age of women (high = older)	-.0084	.450
1. Place of origin of women, parents, i.e. effect of being rural. High = rural.	+.0057	.466
2. Proportion of years in woman's life spent outside of Istanbul. High = more years outside Istanbul.	+.0566	.197
3. Property ownership (family capital: land, house, apartment etc.) in Istanbul, and in place of origin. High = more capital owned.	+.0207	.378
4. Consumer goods available in the household (TV, radio, video, music set etc.; total of 16 items). High = more items in the household.	+.0374	.287
5. Religious devoutness (praying, fasting, reading Kuran in Arabic, children's religious education). High = more religious.	+.0366	.291
Continued over		
6. Health status of woman and household members. High = worse health.	+.0812	.110

⁸ A substantial proportion of this consisted of open-ended questions trying to capture the original responses of the women.

Discussion of the findings of multivariate analysis

The higher the husband’s education the lower the child mortality

In our sample, 97 per cent of the husbands were said to be literate. Only eight per cent had never been to school; ten per cent went to primary school, but dropped out; 62 per cent finished primary school. Eleven per cent went to secondary school, but did not complete it; only nine per cent had completed secondary school, or had any further education.

In this compound, one point was given for being literate, and another point for having any education further than primary school.

Table 5
Husband’s education compound

Value	Frequency	Percentage	Average CMI
0	8	3.5	3.1283
1	176	76.9	0.9948
2	45	19.7	0.3182
Total	229	100	0.9987

In a cross-national study by the United Nations (1985), it was shown that mother’s education was a more powerful explanatory variable than father’s education in rural areas. It is suggested that in urban areas variation in the father’s education was more extensive and associated more with class and status differences and, perhaps for these reasons, the father’s education rivalled the explanatory effectiveness of the mother’s education. Hobcraft, McDonald and Rutstein (1984) in their cross-national study found that in Latin American countries, mother’s education had more explanatory power; in some Asian and Islamic countries father’s education and occupation and mother’s work status have emerged as rival predictor variables (Aksit and Aksit 1989:571-572). In my sample also, the husbands’ formal education seems more relevant to child mortality than is women’s formal education or other criteria.

Similarly, in a study of the 1982 birth cohorts, Toros and Kulu (1988) found that father’s education was one of the most important factors associated with infant survival.⁹ Babies whose fathers did not have primary school education were 1.6 times more likely to die within the first year of life than babies whose fathers had at least finished primary school. Babies whose mothers had no primary school education, however, were 1.15 times more likely to die in their first year.¹⁰ In this study the authors also considered rural or urban residence, maternal age, birth intervals, parity, use of health services, swaddling, and standard of life. With multiple regression analysis, they found education and birth intervals to have the greatest effect on infant mortality (Toros and Kulu 1988:18-19,63). These findings of course pose more questions about the process of change that education initiates or provides.

⁹ For the 1982 birth cohort infant mortality was found to be 103.8 per thousand.

¹⁰ Nevertheless, even though father’s education has more explanatory power than mother’s education in their study, in their conclusion Toros and Kulu (1988) concentrate on and give prime importance to mother’s education, cite mother’s level of education as one of the most influential factors affecting child health, and secondarily cite father’s level of education as also securing lower levels of infant mortality. I find this to be a significant example of the prevalence of a conceptual emphasis on mothers as a primary problem in scientific discourse.

In my study, on the other hand, the women's comparable formal education does not emerge as one of the most important variables. In Gş• kent, the husband's education may be a more important determinant because the women are considerably restricted in their movements, and subject to the authority of their husbands in making daily decisions. For example, 47 per cent of the women in the subsample said their husbands did not allow them to go out into the street alone, 28 per cent said their husbands did not allow them to go out shopping, 11 per cent to invite over female friends, 10 per cent to socialize with neighbours, and nine per cent to see the wives' own relatives. Furthermore, in response to a set of questions meant to ascertain decision-making behaviour, only a minority of women said they had more of a say over certain issues than their husbands. The vast majority of women did not feel they were the decision makers in their households.

Furthermore, more education for the husband may mean easier access to important institutions like hospitals and to relevant health-related knowledge. Also, it may mean that the men are less dependent on the world view imposed by their own families. More than the content of the education they have received, their years of schooling may mean an external reference point for the men and thus a break from the patriarchal constraints which also affect their wives and children. The emancipation of men by educational experience may serve women by allowing men more freedom to support the women in their own lives, which includes their reproductive choices and how they raise their children.

Household composition: patrilocal extended households

The in-depth interview results showed that not only women who were currently living in patrilocal extended households,¹¹ but also women who initially had given birth (or had become pregnant and miscarried) in a patrilocal extended family, tended to have a higher rate of child mortality than women who had their first birth or miscarriage in a nuclear family. Another criterion in assessing the extent of 'patrilocal residence' for the woman was the presence of her mother-in-law during the in-depth interview. Generally we had no problem in interviewing the women in the sample privately: many women even expressed appreciation that we were doing research on child health. Some mothers-in-law, however, were apprehensive when we said that we wanted to talk to their daughters-in-law privately, and some would not allow full or even partial privacy during the in-depth interviews.

I took such problem cases to be an indication of severe restriction on the young women, an indication of control of the daughters-in-law and the extent to which they are blocked from outside influences. These young women were classified separately (see Table 6).

¹¹ In my interview sample four different types of households were classified: (1) 68 per cent of the households were nuclear; (2) 27 per cent were extended; this group comprises 25 per cent where the couple lives with the husband's relatives (patrilocal extended), and two per cent where both the husband's and the wife's relatives live with them; (3) in three per cent of households the wife's relatives live with them; and (4) two per cent are 'fragmented' households consisting of a mother and children, but not an adult couple.

Table 6
Child mortality in relation to household types

Type of household	Number	Percentage	Average CMI
1. At present nuclear, and nuclear during first pregnancy of woman	90	39.3	0.6312
2. Patrilocal extended either at present or during first pregnancy	95	41.5	0.8532
3. Patrilocal extended at present and also during first pregnancy	41	17.9	1.3355
4. Patrilocal extended at present and during first pregnancy and mother-in-law at least partly present during interview	3	1.3	4.3379
Total	229	100	0.9998

The literature provides evidence from the Middle East and elsewhere suggesting that the relationship between extended household structure and higher infant mortality rate is not unique to Gš• kent. In her research on the relation between household structure and child mortality in low-income areas in Amman, Deeb (1987:152) found that the presence of another woman (usually mother-in-law) was associated with a high childhood mortality, despite the fact that these extended households were characterized by a higher total income than nuclear households. A similar finding was reported by Caldwell (1979) of Nigerian women, that children living in extended households experienced higher mortality than children living in nuclear households. Caldwell argued that this was because mothers in extended households were restricted in their decision making by traditional beliefs imposed by the in-laws. In contrast to this, a study in Malaysia by Butz, DaVanzo and Habicht (1982) found that the presence of grandparents was associated with lower infant mortality.

To my knowledge, no other research on Turkey has tried to explore the relationship between household structure and child mortality. My data indicate that children born into patrilocal extended households have a higher incidence of mortality than children born into nuclear families ¹²

In view of this, given the dynamics of a culture that finds its core expression in the relationship structures of the family and its main arena of practice in the household, living with in-laws under the same roof presents serious handicaps for at least some of the married women in their nurturing and mothering capabilities toward their children. This is true not only in individual decision making, but more generally in a daughter-in-law's overall secondary and servile position in a patriarchal, gerontocratic family. This position, combined with a patrilocal extended household, and the severity of the constraints and interferences by a woman's in-laws, can crucially determine the survival of her

¹² In the interview sample and also in the survey sample of 1025 households an interesting difference became apparent in the family structures of the households which had experienced infant mortality in the previous one-year period. Extended patrilineal families constituted only 22 per cent of all households within the survey sample, but 38 per cent of households which experienced infant mortality in the previous year.

children. The question is not only one of individual health-related habits or curative actions, but one of overall mental health for the mother and her child within the patrilocal extended household.¹³

In research related to child health as well as in popular thought in Turkey, the influence of the extended family and the older generation on child health has in general been considered to be positive; closeness among the family members has been one of the prime points of pride and cultural identity in Turkey. The transmission of experience and skills in child-rearing has been considered valuable for child development, as has the passing down of a cultural heritage embodying a system of mutual support among kinsmen.

Health practitioners have sometimes questioned the validity or even suggested the harmfulness of traditional ways of bringing up children, often imposed upon the young mother by elderly women, in most cases the mother-in-law; but this questioning has been limited to considerations of individual traditional practices such as feeding, swaddling, or specific ways of curing diarrhoea, the perception of illness in the child, or the imposed timing of taking the child to the doctor (see Cin et al. 1975; Aksayan 1983). Little attention has been given to the overall well-being or the psychic situation of the young mother within the patriarchal extended family, or to her nurturing responsibilities and capabilities within the extended family.

However, in social science and other sources, it has been extensively commented that living with a mother-in-law under the same roof will bring a considerable amount of strain for a young woman (Demirsar 1985:262). In fact, the strains involved in the relationship between mother-in-law and daughter-in-law are perhaps one of the most universally encountered issues, documented in popular literature, anecdotes, mythologies and anthropological studies. Turkish culture has abundant contemporary data from the media, films, folk culture, literature and social science research indicating the difficulties for a young bride living or interacting with her in-laws. It is said that within the family young women are controlled and their status is low.

Especially the young bride is expected to serve all the adults within the patriarchal household. Once she bears a son, however, her status increases, and it reaches a peak when the son grows up and brings in a bride, the cycle thus repeating itself (Kagit• ibasi 1982:12).

Abadan-Unat (1986:187) has noted that in recent years the position of 'the woman' has improved more than that of 'the young woman', who is still subject to strict social control.

In line with his comments and perceptions on Turkish culture, the child psychiatrist Y•r•Ykoglu (1980:165–166) finds that living under the same roof as an extended family is detrimental for child health, and he advocates that grandparents live nearby. The geographical or psychological extent of this distance, however, is not specified.

How can these general ideological or specific intrafamilial situations reflect on child health or child survival in the household? Certain psychological theories associate emotional deprivation with poor health, and even death in infancy and childhood. Spitz's (1946) research, for example, has led to the further conceptualization and testing of 'anaclitic depression', developed by 6-8 month-old babies when they are deprived of emotional closeness for three months. The symptoms are crying and insomnia and a predisposition to illness. If there is separation from the mother for more than five months with no other substitute emotional support, not only physical but also mental deficiencies

¹³ Tuncbilek and Ulusoy (1988:64) cite consanguineous marriages as another factor causing infant mortality rates to rise. In my research I was not concerned with the issue of genetic diseases, but with the social relations within which consanguinity plays a role as part of the extended family and patriarchal ideology.

appear. 'One stage further and the baby loses resistance against infectious illnesses, and the mortality rate increases' (Hopf 1986:123-124).

A woman from my subsample had lost one of her three children: her first child died at two months old. She was living with her husband's uncle's family and there were seven people in the household. She recalls that they were very bad-tempered, interfering people. Her husband used to drink, and later she had to divorce him because of his heavy drinking. 'I couldn't go near my child when it was crying. They wouldn't let me. She cried and cried and died'.

Another case study: a woman from Central Anatolia was married in her early teens. Even though she wove carpets and contributed significantly to the upkeep of the patrilocal family into which she moved, she recalls being pushed around and belittled. In addition, the villagers made fun of her for giving birth so young. When her husband went to military service, her first baby had pneumonia. The baby was ill for over 40 days, but her mother-in-law paid no attention and would not let her see a doctor. 'It'll pass', she kept on saying. Her own mother, on the other hand, went around and collected medicine from families of other sick babies in the village and tried to give these to her grandchild. The baby eventually died.

I am not suggesting that the mother is always prohibited from physically nurturing her child. In the analysis of transitional objects, psychologists have made the further distinction of physical and psychical separateness of the caregiver: 'It should be noted, however, it is not the physical but psychical separateness from the mother which counts more crucially in the transition phenomena' (G lcerce 1990). Also, Brazelton et al. have observed in their film series 'The Love Dance' a number of rhythmic love movements between the young baby (the oldest being four months old) and the mother. The young baby and the mother seem to develop an almost 'instinctual' rhythmic response to each other. If the mother is unable to respond to this rhythm, for example if she has a severe approach or if she is inexpressive, the situation becomes incomprehensible for the young infant (Yazgan 1990:22).

Given the inherent conflicts of relationships among in-laws and their implications for the young mother, the traditionally established expectations of daily service, and the power struggle especially between mothers-in-law and daughters-in-law under an overall patriarchal value system, close proximity with in-laws becomes detrimental not only to the formation of the conjugal bond between husband and wife but also to the psychological well-being and independence of the young mother. This damages her nurturing capabilities and negatively affects the survival of infants and children. The extreme form of this proximity is living together under the same roof, as is the case in households defined as patrilocally extended households.

Of course, detrimental influences may also occur when the young mother is living with her husband separately in what is defined as a nuclear family. The nature and the frequency of the interferences and the nature of the psychological bond between the husband and his parental family will determine the extent of the husband's independence and the extent of control the young mother has in bringing up her children and sharing the resources of the household.

I do not want to dismiss the role of the mother-in-law as valuable teacher, helper and friend to young women (see Mernissi 1975:69-80), nor deny that there may be many exceptions where mother and daughters-in-law genuinely live together harmoniously. Neither am I dismissing the valuable role of the family as a protective shelter for individuals in a society where there is hardly any other form of emotional, social or welfare security. Also, of course, every case where there are forms of oppression within the household will not result automatically in poor child health and mortality.

However, oppression encountered by women in their marital families does contribute significantly to poor child health and mortality by significantly reducing their ability to nurture their children physically and emotionally. The higher incidence of infant and child mortality encountered in patrilocal

extended families does seem to support this hypothesis. In my sample children born into patrilocal extended families have had a higher incidence of mortality than children born into nuclear families where there are no agnatic kin and no visibly interfering mother-in-law.

The mother's attitude towards abortion

The third variable is an indication of the woman's attitudes towards taking a radical initiative for her own reproductive course, and the degree of her conformity (or her internalization) with values that subject the course of her reproductive life to decisions made within the patriarchal family logic and within the context of secular or religious societal reference points.

In this compound variable I tried to assess the women's attitudes towards abortion. Women were asked if they thought it was all right for a woman to have an abortion if (a) the pregnant woman was poor and already had a lot of children, (b) the medical doctor said the pregnancy was harmful for the woman's health, (c) the medical doctor said that the baby might be born deformed or with a physical disability, or (d) none of the above negative situations were present, but the woman was unwilling to have a child. Women were given one point for each separate condition where they stated that it was not feasible to have an abortion (see Table 7).¹⁴

When these variables are examined individually, it is clear that 83 per cent of the women (N=190) thought that it was feasible to have an abortion if the child would be born deformed. Similarly, 83 per cent of the women (N=189) thought that it was feasible to have an abortion if the pregnancy meant harmful health effects for the pregnant woman. Seventy-four per cent of the women (N=169) thought that it was feasible for women to have an abortion if they already had children, and were poor. Finally, a reduced number of women, 57 per cent (N=131), but nevertheless again the majority, felt that it was all right for a woman to have an abortion if she did not want to have a child even without the presence of the above negative conditions.

Table 7
Women's scores as regards their attitudes towards abortion

Value	Frequency	Percentage
0	116	50.7
1	53	23.1
2	31	13.5
3	9	3.9
4	20	8.7
Total	229	100

¹⁴ The actual law concerning abortion in Turkey received much public and parliamentary attention, and was finally accepted in parliament in May 1983. In summary the law states that termination of pregnancies up till the end of the tenth week is legal upon the request of individuals, but in the case of those who are married, the consent of both spouses is necessary for those legally authorized to perform these operations. Even though in practice most health practitioners will not ask for the husband's permission, it does mean that the law allows the husband the final say over the decision of abortion.

To my knowledge, no other research has so far tried to build a relationship of women's attitudes to contraception and abortion with child mortality. However, in this study, the responses about women's attitudes to abortion also give an idea of the women's perception of their own initiative and control in their reproductive life. One of the conservative arguments given by many women in my sample for not accepting abortion was that since a woman has conceived, she must go ahead and give birth. This was opposed by other women who stated that a woman should do what she feels is feasible and suitable to her own particular condition.

The fact that this variable had more significance than women's formal education seems to suggest that in a society where women are mostly confined to the house and to family relationships, and where their reproductive contribution is crucially important, how women perceive themselves in relation to their reproductive life has more important consequences for child mortality than years of schooling in formal state education. It is meaningful that women who had the strictest attitude towards abortion, those who stated that women should go ahead and give birth under whatever circumstances once they became pregnant, also had the highest experience of child mortality.¹⁵

The prevalence of drinking and smoking by household members

Studies elsewhere have already established the links between low birth weight and mothers' smoking, and the detrimental physical and psychological effects of the mother's excessive drinking on child health and infant mortality (see Hulbert 1989:19-21).

In this compound variable, households where there was a regular smoker (other than the mother) got one point; households where there was at least one alcohol drinker (mostly husbands or male in-laws) got another point. If this member was quoted as drinking at least two to three times a week, then a further point was given (see Table 8). Here there are two extreme types of households: in 19 per cent of the sample there is no smoking or drinking; in six per cent there is smoking and also excessive drinking.

Table 8
Smoking and drinking in the households

Value	Frequency	Percentage
0	44	19.2
1	134	58.5
2	37	16.2
3	14	6.1
Total	229	100

Again, the research points to the importance of conditions created by people other than the actual mother of the child. Although most of the previous research has concentrated on alcohol and cigarette consumption by the mother, in my sample poor child survival is linked with the smoking and drinking

¹⁵ This important issue brings us also to question the recent concerns in the USA over issues of mother rights versus child (or foetal) rights, where once again mothers are held solely responsible for the well-being and survival of children, to the exclusion of fathers' responsibility (Politt 1990a,b).

of household members other than the mother. In the case of heavy drinking, this obviously implies the negative psychological effects of living closely with people with drinking problems, as well as the expenditure of the household budget for smoking and drinking.

Comment on the four findings

Only one of the most important four compound variables seems to be a personal characteristic of the mother herself: her attitude towards the 'legitimacy' or acceptability of abortion. The other three variables, her husband's education, the presence or absence of agnatic in-laws and heavy drinking and smoking in the household are all 'environmental' factors within which the mother tries to nurture and raise her child.

The sample seems to suggest two extreme types, representing two different social environments: in the 'bad cases' there is extreme patriarchal control of the woman in that she lives with her in-laws; her husband has a poor education, and thus his dependency on his family is greater; she has internalized reproductive values which leave her without much capacity for autonomy; and there is heavy drinking and smoking in the household. In contrast to this picture, in the 'good cases' there is high education and, together with this, a separate, nuclear family residence into which babies are born. The woman's views on abortion are more liberal than religious or secular dictates, indicating a woman ready to try alternatives; and the household is free of the ill effects of alcohol or cigarette consumption.

Concluding remarks

Two separate and rather dramatic events during the field research directed my attention to a critical consideration of the resources available outside the household which the women can mobilize for child health. The first event was the discovery that the free local health-house in Gš• kent, belonging to the Ministry of Health and Social Assistance, had been taken over in the early 1980s by a group of local men and turned into a mosque (see GŸrsoy-Tezcan 1991).

The second event was the 1989 local election, with all the campaign propaganda and press news it initiated. An analysis of the election campaign and its media coverage demonstrated the lack of any voicing or visibility of issues related specifically to women's interests. In the election process women appeared to be almost nonexistent as political candidates, voters, and as a separate voice.¹⁶ Within the limits of this article, I do not propose to deal with the issue of local community decisions within the traditional religious and the modern secular decision-making processes, nor with the distribution of surplus capital. I have limited my discussion here to the findings of the in-depth questionnaires.

The results of this part of the study point to the need for a review of the theoretical paradigm that necessitates an almost exclusive linkage of child health to a focus on mother-child bonding, nurturing and a meticulous evaluation of the mother's characteristics. Our research has shown that only one out of the four most influential factors contributing to a high child mortality experience is linked to the individual attributes of the mother: her attitude towards abortion. The other three factors, the father's education, household composition, and smoking and drinking by household members other than the mother, are all beyond the mother's immediate control. Even though it may entail many practical and analytical difficulties, direct data collection from fathers, with a view to exploring the fathers' life experiences and attitudes may yield even more significant results in explaining child health, survival and mortality. This shift of focus from mothers to fathers will facilitate the discussion and analysis of

¹⁶ Since the early years of the establishment of the republic, in the 1920s, women have had full political rights in Turkey. Here, the issue is not one of legal rights but one of actual practice and discourse, comparable to issues of political life in the USA.

the relationship between the State and the family, religion and democracy and their influence on child health at national and international levels.

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