

CHILDREN IN ONE-PARENT FAMILIES: SURVIVAL AS AN INDICATOR OF THE ROLE OF THE PARENTS

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This study tries to shed light on the way in which family characteristics affected the survival of children in nineteenth-century European societies. Insights from recent epidemiological studies were used to construct a framework via which the absence or loss of one of the parents could affect the health and survival of children. The review not only showed how important family structure was for survival of children, it also provided insight in the differences in the roles played by fathers and mothers and indicated that the wider kinship network is a factor that is of great relevance in studying the effects of family structure on living conditions of children. Current research focuses on the relationship between religion, health, and mortality in the nineteenth and early-twentieth centuries; social-class and gender differences in mortality; and the current social and demographic situation of the Jews in the Netherlands.

Infants and young children in nineteenth-century European societies spent a high proportion of their time under parental supervision inside or directly nearby the home. Only a fraction of children younger than seven years old attended school, and they usually did so for a limited part of the year. Work outside the home generally did not start before children were at about the same age.¹ As state and church played only a minor role in allocating the resources that were essential for the quality of life of the family members, it was therefore the family situation that determined to a large extent the life chances of its members and of children in particular.

Historical research into characteristics of family life that affect the well-being of its members often has been limited to the effect of the income, property, or socioeconomic status of the family. Yet, there are more dimensions of family life that might have an influence on the living conditions of its members: the structure of the family, the family culture, and the quality of the relationship.² One of the structural character-

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istics of the family—the presence of one or two parents—has in the past two decades become a central issue in social science research. In studying the consequences for children growing up in a one-parent family, be it as a child of an unwed mother or in a family that has undergone a divorce, the attention also focused on the different roles that fathers and mothers play in family life and on the effects that these different roles have on the child.³ Interest in the historical role of fathers also has grown in the past decade, partly as a response to the new interest in fathers in our own time. By studying the relation between family structure and the living conditions of the family members, those of children in particular, important information on this issue might become available as well.⁴

To indicate differences in the living conditions of groups in society, use is normally made of economic variables such as income and property. Amartya Sen in particular has argued that in judging a person's quality of life, attention has to be shifted from an exclusive concentration on incomes and commodities, which are valued mainly as means to other ends, to things that people value intrinsically.⁵ Because living a long and healthy life is one of the aspirations that is fairly universally valued and valued very strongly, the duration of human life might be used as an excellent indicator of the quality of human life. That a long life is valued so highly is not only because living is itself valued but also because it is a necessary requirement for carrying out plans and projects that are desired for other reasons. In addition, the extension of the duration of life is also valuable because it is often directly or indirectly linked with other highly estimated characteristics, such as increased adult literacy and better education.

Measures for the duration of human life—or their complement, mortality rates—clearly have other advantages as measures for the quality of human life, in particular in studying past societies. These advantages relate to the accessibility, coverage, and quality of mortality statistics. Death is an outcome that leaves not much room for changing definitions over time or space and that lacks the multidimensional complexity that indicators as income or wealth have. Second, mortality registration was institutionalized in many countries long before that was the case for reporting of other individual characteristics.⁶ In many European countries, the registration of deaths started in the beginning of the nineteenth century and covered the whole population, not only a privileged group. Because death certificates contain information on several characteristics of the deceased such as gender and occupation of the parent, comparisons of the health situation in different time periods, different regions, and different social groups are possible. Judging from the accessibility of the data, as well as from the coverage of the data with regard to time period and subgroups of the population, mortality data are a valuable indicator for inequalities between the conditions of people living in various family contexts.

As indicators of living conditions, data on the mortality of children have clear advantages above mortality rates for other ages. This has to do with the higher vulnerability of children in general, the better access to death records for children, the wider range of options for calculating death risks for children, as well as with the very strong relation between total mortality, expectation of life, and infant and child mortality in nineteenth-century populations.

Until a decade ago, historical studies of the consequences of living in a particular family context for the survival prospects of children were very small in number. In the past ten years, however, much progress in this field has been made. The development of large historical databases and the diffusion within the historical world of the statisti-

cal methods in use in epidemiology have made it easier to measure accurately how children born or raised in "incomplete" families in the past fared physically.

To study the effect of family structure on living conditions of children, the survival prospects of two groups of children will be examined: those of children born out of wedlock (illegitimate children) and those of children who were born in a family but who lost their mother or father through death.

Being born or reared in a one-parent family was not uncommon in many countries in Europe during a large part of the nineteenth century. First, many children were born out of wedlock. The nineteenth century witnessed an international upsurge in illegitimacy ratios. In 1850, the amount of all births that were illegitimate was about 6.5 percent in England, more than 7 percent in France, 9 percent in Sweden, 11.1 percent in Denmark, and exceeded 10 percent in most parts of Germany.⁷ Although very high ratios also could be found in rural regions of Europe, it was particularly in the big cities that large proportions of children were born to unwed mothers: in Paris, 37 percent of all births in the period 1810 to 1819; in Vienna, 49 percent in 1851 to 1855; in Stockholm, 46 percent in 1851 to 1855.⁸ It was only after 1870 that a decline in nonmarital fertility took place in all countries of Europe, a decline that lasted until the middle of the 1960s.

In addition, a nonnegligible proportion of children who were born in a family context was confronted during childhood with the loss of one or both parents. Yet, the death of a parent was an event that families did not experience very often during the early stages of the life of the child. Data for the Netherlands for the period 1850 to 1900 show that between 8 and 11 percent of all persons age twenty or younger had lost one of their parents, and another 1 to 2 percent had lost both parents.⁹ Venetian data for the mid-nineteenth century indicate that 21 percent of the people who reached age twenty had a deceased father, and 18 percent had a deceased mother.¹⁰ Thus, even in the mid-nineteenth century, premature orphanhood was experienced only by a minority of the population.

An even smaller proportion of children was confronted with parental divorce or desertion. Divorce was not only very infrequent in most countries of Europe until the end of the nineteenth century, but the average number of minor children in marriages undergoing divorce was also usually low.¹¹ Moreover, historical information on the situation of children of divorced parents is almost completely lacking. One might expect that ill treatment of children was widespread in those marriages that were characterized by marital conflicts, and that disputes involving children, but now between parent and stepparent, continued after remarriage of the spouse who had custody of the child. The number of cases in historical studies is too restricted to permit any generalization.¹² Of course, the health situation of children also might be affected by the ordinary absence of men moving in search of work or unable to work because of chronic illness, long-term unemployment, or captivity, but these groups will not be included here.¹³

The main questions that will be answered are the following: were the effects on the survival of the child stronger in cases where the biological father was absent than in those situations in which the biological mother was away? Were the consequences for the mortality level of children more disruptive when the child was young than when he or she had already reached a more advanced age? Were the effects sustained over time, or did they disappear after a shorter or longer period? Were the effects of the loss or absence of the parent conditioned by other individual or environmental characteristics such as socioeconomic position or availability of social support?

By comparing the experiences of children in families without a father with those without a mother or those in which both were present, this overview also provides a way to evaluate the role of the father versus that of the mother. By contrasting the living conditions of families headed by women with that of husband-wife households, an assessment might be made of the relative weight of fathers' and mothers' contributions to the well-being of the family and the effect that the absence of one of them had on the well-being of the family members.

In answering these questions, information mainly will be used relating to those countries in Europe in which the system of simple nuclear households, based on the conjugal family, prevailed and in which coresidence of generations was not a dominant household formation rule. Data availability made it necessary to restrict this overview to the period between about 1800 and the end of World War I.

PARENTAL DEATH AND DEATH OF THE CHILD: PATHWAYS OF INFLUENCE

In searching for pathways via which parental loss might influence the survival of children, the explanatory schemes used in studies of the relationship among bereavement, poor health, and mortality might be fruitfully applied.¹⁴ Three mechanisms leading to excess mortality of bereaved persons—emotional stress and grief caused by the death of the spouse, loss of social support, and loss of material or task support—also may directly or indirectly play a role in the mortality of children after the loss of one of their parents.¹⁵ Although the loss of a parent may also cause a sense of insecurity, helplessness, and hopelessness in very young children, it is mostly via the effect on the surviving parent that the health of the children will be affected.¹⁶ Loneliness, depressed mood, and bereavement may negatively affect the health and functioning of the surviving spouse within the family and weaken the position of the child. More important for the health of the child, however, are two other mechanisms: loss of social support, either through the direct effects of the death of a spouse or parent or through the loss of social networks maintained primarily by the deceased parent; and the loss of material support through a fall in income or the loss of care and support in everyday tasks such as food preparation, care of the sick, and so forth. Both of these mechanisms might not only endanger the health of the child indirectly—by negatively affecting the personal and social resources available to the surviving spouse—but also might have a direct effect on the child.

In the nineteenth and early-twentieth centuries, numerous changes in material and social support could be precipitated by the death of a parent. These were more likely to be disruptive as people were much more dependent on the household to produce goods and services essential for survival.¹⁷ Prevailing systems of division of labor made families strongly dependent on the household head as the main provider of goods. The loss of the husband increased the risk of falling below the level of consumption where health is adversely affected.¹⁸ The death of the father could be accompanied by a forced move to other, lower standard housing. Deteriorated consumption possibilities could force the mother to engage in market work, which implied that she could spend less time on maternal activities, and negatively affected the cleanliness of the home environment and the nutritional state of the children. English household budgets for the middle of the nineteenth century demonstrate some of these consequences very

clearly.¹⁹ Female-headed households not only were buying less food but also were shifting expenditure away from basic foodstuffs toward store-bought food requiring little preparation. Tight budgetary constraints and limited time spent at home also were conducive to spending up to one-third less on coal and considerably less on soap than husband-and-wife households spent. These expenditure patterns and lone mothers' greater commitment to market work had a negative effect on the comfort and cleanliness of their homes and on their children. The same household accounts also highlight another important implication of the relative poverty of families headed by women: the importance of children's earnings to the welfare of their mothers and siblings. Children in families headed by women had relatively high participation rates, were put to work earlier than other children, and often had to accept more physically demanding and dangerous work. The increased energy demands on their bodies were not offset by better nutrition, undermining the well-being of the child.

Yet, due to the fact that mothers were almost completely responsible for child care and household affairs, the loss of the mother had an even stronger potential affect on the health of the child than the loss of the male breadwinner. First, in the first weeks after delivery, maternal presence was essential for adequate feeding of the child. Particularly in a situation in which resources were few, pathogens abundant, and sanitation a luxury, finding substitute food for the newborn was practically impossible. Woodbury showed the fatal consequences of this situation already in the 1920s: infants whose mothers died within one year following confinement had a mortality rate that was more than four times as high as that for other infants.²⁰ Recent research has confirmed the existence of these deadly consequences for nineteenth-century Europe. Högberg and Bröström, using data on seven mid-nineteenth-century Swedish parishes, found that the death of a mother during her infant's first year reduced the probability of the infant surviving that year from 97 to 50 percent.²¹ Åkerman recently confirmed the fatal consequences of the mother's death during the first year of life of the child with data for several other Swedish parishes from the same period.²²

The mother's presence was not only related to the availability of breast-feeding, nor was her presence only essential during this first stage of the child's life. During their first months of life, children were very vulnerable for all kinds of external factors, and the time the mother spent in food preparation, housecleaning, and sickness care was very important for the survival of the children. After this period, strong effects on the survival of the child could be expected given the usual tasks women fulfilled. Women performed most housekeeping tasks; they were much more likely to be at home, spending time with their children and acting as a prevention against accidents, being available as primary caregiver, and dealing with the early treatment of children's illnesses. The death of the mother therefore could lead to an increase in the level of environmental contamination, higher nutritional deficiency, greater risks for injuries and accidents, and less personal illness control.²³ As the mother tended to maintain the family connections with extended kin and neighbors, surviving mothers might have been better able to acquire support from family and friends. They were aided in this by the fact that widows and their children were considered poor, helpless, and vulnerable persons eligible for religious admonishments and legal provisions.²⁴ Continuity in the child's daily life therefore occurred more often after the death of the father than after the death of the mother.²⁵

PARENTAL LOSS AND AGE OF THE CHILD: EMPIRICAL STUDIES OF MORTALITY PATTERNS

Recent studies have confirmed that this difference in parental roles had enormous consequences for the survival of children. At the same time, these studies showed that these effects varied greatly according to the age of the children. Bengtsson, using data for the Swedish city of Linköping for the periods 1797 to 1810, 1840 to 1849, and 1870 to 1875, showed that of the children who became motherless during their first year of life, 60 percent died before age fifteen compared with 30 percent of the fatherless children and 25 percent of the children with surviving parents. However, parental deprivation above the age of one year did not affect death rates of children.²⁶ Åkerman, Högberg, and Andersson found that of those children who had lost their parent before age ten, only 40 percent of the motherless infants and 70 percent of the fatherless infants survived their fifteenth birthday. Being an orphan before age one or two was very critical and resulted in a high death risk, while many more children older than five were capable of surviving.²⁷

Schlumbohm studied German data from the community of Belm to compare infant mortality rates of children who had lost their father or mother during their first year of life.²⁸ Compared with the situation in which the mother survived until the fifteenth year of life of the child, infant mortality rates were much higher in cases in which the mother had died (264 per 1,000) than in cases in which she had survived (153 per 1,000). If the father died during the first year of life of the child, infant mortality rates were not statistically different from those cases in which the father survived. Death rates among children ages one to five years old also were higher after the death of the mother during the first year of the child's life: 194 per 1,000 against 118 per 1,000. Schlumbohm's study confirmed that child mortality did not increase when the death of the parents took place after the child had reached age one. Whereas the higher mortality during the first year of life was explained by the termination of breast-feeding, the increase of mortality after the first year of life without a mother pointed to the influence of other factors: care by the mother during the first year of life and the social stability created by her presence had longer lasting effects on the physical well-being of the child.

Using an evolutionary biology perspective, Voland studied the patterns of investment in families characterized by the premature death of one parent, using data on infant and child mortality for Ostfriesland (Germany) in the period 1668 to 1879.²⁹ The mortality of children during the first month of life was about twice as high when the mother died as when the father died, but these figures tended to approach one another as the children became older. In addition to the close spatial and psychosocial relationship between mother and child, it was the perinatal risk causing a correlation between maternal and infant mortality that was partly responsible for this disparity. Yet, this was not sufficient to explain the excessive infant mortality after maternal loss.

A question that is seldom asked is whether boys and girls were affected in the same degree by the loss of the father or mother. Present-day data from the Harvard Child Bereavement Study relating to children between the ages of six and seventeen did not show significant differences between the direct physical responses of boys and girls on hearing the news of the death of the father or afterward.³⁰ In historical populations, gender of the orphaned child might, for example, have influenced the way social support was mobilized or the roles that were played in the family: girls might have been

more prepared than boys to take over cooking and cleaning, and thus at younger ages could better take care of themselves. Contemporary and historical studies relating to developing countries also point to the gender-specific effects of the death of the parent on the child. A recent study in Bangladesh showed that the loss of the father was associated with an increase in the child mortality rate, regardless of the child's gender, whereas the mother's death was associated with almost a 200 percent increase in the mortality of her sons and a more than 300 percent increase in the mortality of her daughters.³¹ Campbell and Lee, studying data for a village in northeast China during the eighteenth and nineteenth centuries relating to children ages two to fifteen *sui*, also found that girls were affected much more by being orphaned than boys.³² A recent study by Klasen based on family reconstitution data of about 140,000 people in rural western Germany between 1680 and 1870 not only showed that mothers were more willing than fathers to share their resources with their children but also that the gender composition of the family influenced the mortality of mothers and fathers.³³ Higher mortality for fathers in families with mostly boys indicated that fathers were more willing to reduce their share of household resources in favor of boys, whereas for mothers, an increased mortality was observed when girls were living in the household. One might therefore expect that the death of the father or mother also had different effects on boys and girls.

Voland, on the other hand, argued that where families experienced the premature death of one parent, the family investment system, having as its main function the optimal social placement of its members, was drastically disturbed.³⁴ This had more negative consequences for boys than for girls: boys were constitutionally more susceptible under stress, and, in case the early death of one parent was associated with economic difficulties for the surviving spouse and the children, daughter-biased investment represented a more adaptive strategy for the surviving parent. These high male mortality risks should be more pronounced in families with surviving mothers than in those with surviving fathers because the death of a spouse had a more dramatic effect in terms of subsistence on the women than on the men. The analysis showed that the gender of the half-orphan indeed played a role. Sons of mothers were significantly less likely to survive the first year than daughters of mothers, whereas no gender differences were observed when children were brought up by their fathers. This suggested, according to Voland, some degree of parental manipulation. After the first year of life, no differences were visible. Beekink and colleagues, studying the effect of parental loss on children younger than 12 years old in the Dutch community of Woerden in the period from 1850 to 1930, did not find effects on the survival prospects of the child for various combinations of gender of the child and surviving parent.³⁵

PARENTAL DEATH AND DEATH OF THE CHILD: COMMON CAUSES OR DIRECT EFFECTS?

While the death of a parent may have put a child at risk, this risk was not necessarily sustained over time.³⁶ Most research on the relation between spousal death and health of the surviving spouse documented a gradual improvement in feelings of well-being of the surviving person several months after the loss of the spouse or parent. The majority of bereaved persons adapt successfully to the new circumstances and learn their new roles to play after the first year or two.³⁷ Most twentieth-century studies dealing with excess mortality after the death of the spouse confirm that excess mortality

among surviving spouses is much greater at short than at longer durations after the death of the spouse.³⁸ Nystedt, using data for four agricultural parishes in southern Sweden in the nineteenth century, however, also found strong long-term effects of the death of the spouse.³⁹ Long-term effects were more dependent on reduced access to goods and services for widowed compared with married people. These effects have only recently been neutralized by general economic growth and by public intervention, leaving a larger share for the influence of emotional-focused stress. This greater potential of important long-term effects also might have played a role in the increased death risks of children who had lost their parent in the nineteenth century. The study of the duration of the effect of the loss of the parent, apart from that of the age of the child at the time of death of the parent, is therefore essential.

Another interesting parallel with studies of mortality after the death of the spouse in a nineteenth-century context, partly related to the foregoing issue of the duration of the effect over time, relates to the role of epidemic diseases. The probability of both spouses dying within a short period of time was high in the nineteenth century when infectious pathological agents entered the household in large numbers. The second death occurring shortly after the first may have had nothing to do with the experience of bereavement itself. In the same way, epidemics and comparable factors might explain the association between parental loss and mortality of children. More generally, two kinds of artifacts can be envisaged that may cause a relation between parental loss and child mortality: a common risky event shared by one of the parents and one or more children such as an epidemic disease, diseases passed in utero from an infected mother to her fetus, fires or common drowning, and a common unfavorable environment—diet, housing conditions—shared by parents and children.⁴⁰ In the first case, the common event could have led to the death of the child within a delay of days or weeks after the death of the parent, incorrectly creating an impression of an effect of orphanhood.⁴¹ The “common environment” of parent and child could be hazardous to health, and, in such cases, both parents and children run a risk of early and simultaneous death.

In historical studies, this close but spurious relationship between the orphaned state and the death of the child does not always receive the attention it deserves. How important this factor might have been was shown by Schlumbohm in his earlier cited study: one fifth of the children who died after the death of the father did so within one month after his death.⁴² Schlumbohm suggested that infectious diseases rather than conscious or unconscious discriminative neglect by the mother were the cause of excess mortality among the paternal orphans.

In a more recent work, again relating to Woerden, Beekink et al. studied this issue in more detail.⁴³ Their assumption was that if the death of the child and the death of a parent were the result of common causes, parent(s) and child(ren) would die within a relatively small period of time. As the time span between the death of a parent and the death of a child increases, the credibility of alternative explanations becomes greater. In analyzing their data relating to the period 1850 to 1900, the authors made use of hazard models that included time-varying covariates, indicating how much time had elapsed since the death of a parent. Relative risk estimates showed that children who experienced the death of their mother run a more than four times higher mortality risk between age zero and age twelve than children whose father or mother was still alive. No such increased risk of dying was observed for children whose father had died. In a second series of models in which the length of time elapsed since the death of father or

mother was distinguished, it turned out that the mortality rate was highest during the first month after the parent had died, this being true for both mothers and fathers. At longer durations, the death rate of children whose father had died did not differ from that of children whose father was still alive, whereas children whose mother had died still faced an increased death rate but at a substantially lower level than during the first month after their mother's death. This pattern suggests that in many instances, the death of the parent was not so much the cause of the death of the child, but the death of both parent and child were related to some third factor that had struck more family members at the same time. If a child was able to survive the first month after the death of his or her father, the child's chances of death were not higher than those of children from intact families. Children who had lost their mother more than one month but less than six months ago still had a six times higher risk of death than children whose mother was still alive. Even after their mother had been dead for more than half a year, these children still ran a two times higher risk of dying than children from an intact family. Therefore, losing one's mother seemed to reduce the life chances of children considerably, whereas the loss of the father did not seem to influence their life chances at all. In particular, during the first half year of a child's life, the death of the mother had a detrimental effect, both during the first month after the mother had died and during the rest of this period. The death of the father had an impact only during the first month after this event occurred. After the first six months of the child's life, the death of the child's father only had an impact during the first month after the father had died, but the impact of the death of the mother had a strong, albeit decreasing impact on the life chances of children even long after this event had occurred.

BUFFERING FACTORS

Several factors might buffer against the harmful effects of the death of the parent on the survival of the children. This relates, for example, to the socioeconomic position of the surviving parent.

In the nineteenth century, many widows and widowers who were left with very young children tried to mitigate the effect of the loss of the spouse by finding a substitute nurse, housekeeper, or breadwinner. The entrance of a stepfather or stepmother could normalize the situation of the child, but entry into stepchild status might also place the stepchildren at greater risk in comparison to children of complete families: selective neglect—medical, nutritional, physical, or emotional—by the stepparent might be the result. In contemporary United States and Europe, stepchildren appear to be more vulnerable to abuse and sexual molestation.⁴⁴ Studies in developing countries have shown that discontinuity in marriage reduced the resources available for raising children from earlier marriages. In a UN study, it appeared that in four African and Asian countries in which the effects could be studied, the category “married more than once” was the most seriously disadvantaged in child mortality levels. Bledsoe showed for Sierra Leone that children had the greatest chance of survival when they were completely identified with the adults with whom they lived, in the sense that they were being cared for by a parental union of their biological mother and biological father.⁴⁵ Where only one member of that union was their parent, that parent could not provide them with as much care and affection as was given to the children of the new union for fear of jeopardizing that union. Bledsoe concluded “that both women and men feel pressure to allocate resources disproportionately to children by unions they most value

at present; thus adults treat children in ways that reflect, or shape, their own relationships to adults whom the children represent." We have hardly any information as to whether in historical European populations the life chances of children increased or decreased after remarriage.

Voland argued that remarriage introduced a genetically unrelated reproducer within the family, a factor that could be associated with investment deficits and risks for the stepchildren. Furthermore, one could expect that women would use a reproductive strategy whereby they would "give up" their first and only child to improve their chances for a second marriage. On the other hand, remarriage coinciding with improvement in living conditions might result in a lowering of infant and child mortality figures compared with those of children living in one-parent families. The results of Voland's study showed that women whose one and only first-born child died had a prospect of remarriage that was 17 percent higher than that of widows whose only child survived. Furthermore, if one compared the ratio of those children who died prior to the remarriage of their surviving parent with those who died subsequently, the children of widows died more frequently prior to a second marriage than did those of a widower. In particular, the first-born offspring of widows died at an above-average rate prior to their mother's remarriage, while half-orphans coming from father-only households died relatively more frequently during the second marriage of their surviving parent after a stepmother had entered the family. Voland suggested that the length of widowhood until remarriage was longer for widows because it took more "length of time until 'impediments to marriage,' namely young children from a previous marriage, no longer exist."

Åkerman and his colleagues showed that of those infants getting a stepmother, 15 percent died before their fifteenth birthday, while infants having no stepmother run a 60 percent risk of dying.⁴⁶ Among fatherless infants, getting a stepfather also had positive effects on survival. For children of remarried widows or widowers, death rates did not differ significantly from those of children in complete families. Beekink and colleagues proved that remarriage of widow or widower did not result in a death rate that differed significantly from those of children in complete families.⁴⁷ The effect of the loss of the father was much lower. The authors point to the fact that this might have been caused by selection, the death of a child from the earlier union facilitating remarriage, or be related to the association between the time between parental loss and remarriage. One might expect the strongest effect of parental loss directly after the death of the parent, but usually during this most critical period, only few remarriages took place, partly for judicial reasons.

One might assume that the effect of the loss of the parent on the child was partly dependent on the availability of a support network and/or on the socioeconomic resources available to the bereaved person and their children. Variations in income and wealth, for example, determined the availability of food, whether forced moving to lower quality housing had to take place, the necessity for a widow to combine paid work with child and home care, and so forth. In an identical way, one might argue that when surviving parents could rely on kin or neighbors or friends for child care, house-keeping, and care during illness, the consequences for the child's health might be less negative than in cases in which such a network was not available. The social network also afforded the context for the enforcement of child care standards and could act against the social isolation that has been linked with child maltreatment.⁴⁸ It is relevant to mention here that in many countries in Europe, at the occasion of the death of the

father of a family, a meeting of a family council was organized in which a guardian and coguardian of the children were designated. The death of the father was thus a moment when the family in its broadest sense might play a role.

Åkerman, Högberg, and Andersson, using data from the Sundsvall district for the period 1800 to 1895, conducted a refined analysis of the survival prospects of orphans who had lost one or both parents taking, among other things, their socioeconomic position into account. They concluded that the excess mortality of orphaned children persisted after the socioeconomic position was controlled, and the same result was found in the above-cited Dutch study.⁴⁹

To study whether socioeconomic position and the presence of a supporting network alleviated or buffered the health-degrading effects of the death of the father or mother, they have to be included as interaction effects in the model. In the Dutch studies, presence of kin was only included as a main effect and measured in a very crude way. It was assumed that the chances that a network of friends and kin was present were higher for native-born people than for couples that were characterized by a longer distance between the study area and the place of birth of the father and mother.⁵⁰

More information on the effect of the presence of kin and relatives inside and outside the household on mortality of children after the loss of the parents can be found in a recent study by De Rosas.⁵¹ De Rosas studied the effect of parental death on the survival of children during the period 1850 to 1869 in three parishes in Venice. Again, the death of the mother during the first two years of her baby's life had a dramatic impact on the baby's chance of survival, raising the relative risk of death to 2.33 times the value in the situation in which both parents were present. The absence of the father had no effect unless the mother also had died: in that case again, the relative risk was more than twice that of children whose parents were both alive. The presence or absence of other older relatives had no effect on the survival of children. When the analysis was restricted to infants whose father was already absent from the household, for death or for other reasons, the death of the father had much more dramatic consequences for children from the lowest social classes. The middle and higher classes, even if they were not necessarily rich, could rely on social and economic buffers that protected their family effectively. Whereas when the family was intact there was no room or need for a protective role of the grandparents, the presence of a grandmother played an important role in fatherless families. Of the four grandparents, it was the mother of the deceased whose presence reduced the relative risks of mortality of her grandchildren, and it did so by almost 40 percent.

For fatherless children ages two to ten, the death of the mother had no effect. The death of the father in motherless families, on the other hand, raised the relative risk of dying by almost four times. Again, an effect of the socioeconomic position was visible: among fatherless families, children from the lower social classes had a much higher mortality than children from other social classes. The kin network did not have an effect on the survival of children in this age range.

ILLEGITIMATE CHILDREN: WHAT MADE THEM SO VULNERABLE?

Compared to orphaned children, children born and raised by unwed mothers were in an even more disadvantaged position. The absence of a spouse in both cases had great potential consequences for the economic well-being of the mother and her child, but compared to unwed mothers, more sources of economic support were available to

widows. One might not only think of inherited property from the husband but also of widows' funds and pensions by life insurance companies.⁵² In addition, widows and their children were considered poor and helpless persons eligible for provisions by charitable institutions, whereas unwed mothers, although usually admitted to church or state poor relief, were often not granted the important extras offered by the nineteenth-century charitable organizations.⁵³ In several countries of Europe, unwed mothers had no possibility of claiming maintenance from the putative father of the child, since inquiries into paternity were forbidden. Illegitimate children could, in principle, be recognized by the father, but even then they were only entitled to a relatively small part of his inheritance. Only children who were legitimated by a subsequent marriage of their parents could, in a legal sense, be considered equal to legitimate children. The potential support of other kin also differentiated unwed mothers and widowed persons: widows had claims to the assistance of her own family and the family of her former husband, whereas unwed mothers could only look to their own relatives. The psychosocial situation of both groups also varied considerably. Whereas the widow was treated with sympathy and respect as she had lost a loved one, in a society that put an emphasis on sexual restraint and chastity, the birth of a child outside wedlock was a violation of the moral code, which had repercussions not only on the mother herself but also on the entire family.⁵⁴ An unwed mother was morally stigmatized, and shame and social exclusion, loss of job and income, and hostility faced her. A bitter proof of this is that when, in the 1850s in the Netherlands, a debate took place on the abolition of capital punishment for infanticide, it was emphasized that the act of killing the child was the final effort to avoid the disgrace and shame associated with unwed motherhood. Being an unwed mother as such was therefore lawfully recognized as a lenitive circumstance for infanticide, and capital punishment for infanticide was in these circumstances abolished. Three decades later, fear of discovery of the delivery of the child was explicitly recognized in terms of the law as a mental condition of influence on infanticide.⁵⁵

EMPIRICAL STUDIES OF MORTALITY OF ILLEGITIMATE CHILDREN

The circumstances of illegitimacy had very negative effects on the health and survival of children born out of wedlock. In almost all analyses of nineteenth- and twentieth-century infant mortality, children born out of wedlock recorded the highest mortality rates.⁵⁶ Dutch, Norwegian, and Swedish national data on infant mortality for the period 1886-1940 show that during the entire period, illegitimate children had a mortality rate that was at least 40 to 50 percent higher than that of legitimate children.⁵⁷

What mechanisms were involved in this excess mortality? A memorandum of the Dutch government of 1898 stated that it was only the negative consequences of the children being fatherless that were involved:

As a rule, the illegitimate children will only lack the [care of their] father. But it is precisely the father who is best, or alone, capable to provide for them, at least financially. Poverty and misery are allotted to the mother, also because of societal prejudices. The bad consequences are unavoidable: . . . a high rate of still-born children; a high mortality rate in the first years.⁵⁸

But illegitimate children were not only characterized by the absence of a legal father. In many other aspects, the circumstances in which they were born differed from those of legitimate children. Many unwed mothers had a proletarian background, and their high mortality could thus be interpreted as caused by poverty, which would have caused high mortality even in the presence of the father. An illegitimate child was often the result of the first pregnancy of a young mother, and for biological reasons alone, one would therefore expect higher death risks among illegitimate children.⁵⁹

During the past two years, several attempts have been made to analyze which of the many factors that make the situation of the unwed mother and child different from that of children living in a complete family might have caused the excess mortality of their children.

In a Dutch study, the mortality of illegitimate children born during the years 1850 to 1852 in the city of The Hague was compared with that of a sample of legitimate births.⁶⁰ Many differences between illegitimate and legitimate children that potentially might be relevant for their survival were observed. First, the time elapsed between the birth of the child and the notification of the birth was considerably longer for illegitimate births. This might have been one of the reasons why among illegitimate births a higher proportion of children, notified as stillborn, was found; live-born children who had died before a birth certificate was made out had to be registered legally as stillborn. Second, the mothers of illegitimate children were, on average, 4.4 years younger than those of legitimate children, a difference that could have an effect on the mortality risks of the children. Third, whereas most legitimate children were notified by the father, in many cases, the person who notified the birth of the child was a medical professional who had assisted in the delivery of the child. Finally, whereas 87 percent of the legitimate children were raised in a household unit consisting of the child and both parents, the situation among illegitimate children was much more varied. About 20 percent of the illegitimate children were born in a household that consisted only of the mother, 15 percent in a household consisting of father and mother, and another 10 percent in a household consisting of the mother and a male household head not being the father of the child.

A life table analysis showed that after one year, 34 percent of the illegitimate children had died, whereas among legitimate children, 23 percent had died. Almost 40 percent of the illegitimate children were legitimated later in life by a marriage between the mother and "father" of the child, implying that the husband, prior to the wedding, had recognized the paternity of the child. This change in legal status had a clear effect on the survival of the child: mortality was lower among the total group of illegitimately born children than among the group that ultimately was not legitimated. After children had reached age one, differences in mortality according to legal status could no longer be observed. Hazard analysis showed that in the first year of life, the legal status of the child still had a clear and statistically significant effect on the risk of death of the child after controlling for other health-related variables such as gender of the child, age and socioeconomic group of the mother, religion, place of birth, and working status of the mother. When the child was illegitimate, the risk that he or she died before reaching age one was 31 percent higher than for children born to married parents. Part of the excess mortality of illegitimate children was mediated by the age of the mother at birth and by the typical socioeconomic position of the unwed mother compared to married

mothers. The multivariate analysis again showed that between ages one and five, a statistically significant effect of the legal status of the child could no longer be found.

In a second stage, the authors attempted to identify factors that could explain differences in mortality within the group of illegitimate children. During the first year of life, the socioeconomic position of the unwed mother, indicated by the occupation of the person who had notified the birth to the vital registration officer, had a strong influence on the death risks of the child. Significantly higher mortality was found among illegitimate children notified by persons without occupation and by illegitimate children notified by a medical professional who had assisted in the delivery. This might be explained by the fact that obstetric practitioners were only called in to attend at pathological and protracted deliveries with higher health risks for the child and by the fact that notification by a professional birth attendant implied that the unwed mother had no relative, friend, or family member to perform this task, indicating that she could not fall back for social support on other people. The place of birth of the mother, used as indicator for the availability of a network, also showed a strong effect: women born outside the city or outside the province had a much higher infant mortality level than women born in The Hague. The household situation of the unwed mother had no statistically significant effect on the mortality of her child nor did the labor force participation of the mother. Between ages one and five, significant differences in mortality within the group of unwed mothers were not observed.

Although the Dutch study strongly suggested that the presence of a supportive network might have played a role in the survival of the illegitimate child, it did not accurately measure the effect of this variable. The accessibility of a family network and the opportunity to call on them might indeed have been greater for native-born people than for nonnative people; place of birth of the mother is a rather crude indicator of the presence of a supportive network. In a small-scale study relating to two Scottish parishes—Rothiemay in Banffshire in northeast Scotland and Torthorwald in Dumfriesshire in southwest Scotland—Blaikie has given more precise information on the role that presence of kin could play in childhood survival.⁶¹ Between 1845 and 1945, differences in perinatal domestic circumstances had a strong effect on the mortality rates of illegitimate children. Blaikie suggested that grandparents played a crucial role in determining whether illegitimate infants died or survived. The existence of the parents of the mother and their willingness to accept babies into their care helped to account for survival of infants who might otherwise have died. There existed considerable variation between one parish and the next as regards the appropriateness of granting relief to unwed mothers, and this collective welfare support also seemed to be an important factor.

Blaikie's study lacked a systematic comparison of the mortality of children living in different family and kin networks. In addition, whereas the importance of collective welfare arrangements was explicitly mentioned, the individual economic circumstances of the mothers, which proved to be important in the Dutch study, were not included in the analysis. A more systematic study of the role that the kin network played in the survival of infants born out of wedlock, including an analysis of the socioeconomic status of the mother, can be found in the work of Brändström.⁶² His study deals with the Swedish Sundsvall region during the period 1800 to 1895 and focuses on the complete reproductive histories of mothers who at least once in their life had given birth to an illegitimate child. The risk of dying for children born illegitimately was 70 to 80 percent higher in comparison with the legitimate children born

later in the same families. After controlling for other variables, such as age of the mother at the time of the birth, social class, and locality, infant mortality among illegitimate children was still 36 percent higher, a figure more or less comparable with the Dutch figure of 31 percent. It turned out that children born to mothers from the upper social stratum who once in their life had given birth to an illegitimate child had 13 percent higher risks of dying in comparison with children from the lowest social stratum. Brändström suggested that this might be explained by the higher degree of acceptance of illegitimate children in the working class. Single mothers of the working class were therefore more capable of handling their situation and found it easier to find jobs so that they could support themselves without the direct aid of family and kin. Women from the upper classes might have been obliged to seek employment outside their normal social network and lacked experience of manual labor, which restricted their chances of finding positions in which they could support both themselves and an illegitimate child.

In a follow-up of his study, Brändström showed that the presence of a kin network had a clear effect on the illegitimate children's chances of survival.⁶³ Having no parents of the mother present in the parish in which the mother gave birth meant a significantly higher mortality for the child. Having one parent present lowered mortality, whereas having both parents alive improved survival rates. The same effects were observed for the presence of grandparents. Whereas the availability of a kin network had significant effects on survival of children of unwed mothers, only very weak effects of the presence of a kin network were visible in a matched control group of women without illegitimate births in their fertile history. Brändström has pointed out that the presence of kin also might have had a negative effect on the life of the unwed mother. The lone mother might be driven out of the parish and live a marginalized existence, with a fatal outcome for her child. For the more geographically stable mothers, family and other kin indeed seemed to have played a repressive role and lowered the chances of survival of the child. The only exception was women who migrated back home shortly before delivery: these women knew that their parents would provide them with some kind of support, and the effect was that infant mortality was lowered.

CONCLUDING REMARKS

Family structure, indicated here by families characterized by parental loss or absence of one or both of the parents, in the past had a strong effect on the survival prospects of the child. The strength of this effect varied considerably according to gender of the absent parent, the time that had passed since the absence of the parent, the age of the child at the time the absence started, and the reason for the absence of the parent.

It is not surprising that in a situation in which enormous hazards were associated with artificial feeding and in which the hygienic situation was substandard the absence of the mother during the first few months after birth had an enormous effect on the survival of the child. This not only becomes clear in comparing the death rates of maternal versus paternal orphans but also in the enormous difference between the mortality levels of orphaned and illegitimate children. Nonetheless, the presence of the father played a role as well, as was witnessed by both the Dutch and the Italian studies on orphanhood, evidenced by the excess mortality of illegitimate children as well as by the lowering of the mortality of illegitimate children after they were legitimated, that is, after they had become part of a complete family.

Unwed mothers and widows and widowers who were in need of a nurse and a housekeeper for the children or urgently required economic and emotional support could try to solve their problems by (re)marrying. If we could believe in fairytales, the consequences for the child were not so positive. The stepchild is usually presented as an unhappy child who is treated cruelly, is receiving insufficient food, has to work hard, and is intentionally exposed to dangerous situations.⁶⁴ The Dutch study and the study by Åkerman and colleagues indicate that at least as far as survival prospects were concerned, children getting a stepparent were certainly better off than children living in a one-parent family.⁶⁵ In the same way, for children of unmarried women, the Dutch study showed that marriage of the mother, be it with the biological father of the child or with another man who had recognized the child, at least during the first year of life also had a positive effect on survival of the child. The mere presence of a new husband or wife, who certainly or probably was not the father or mother of all of the family's children, in general thus improved the child's chances of survival. This result contradicts those of studies in developing countries, cited earlier. The question, of course, remains whether stepchildren were treated as well as children born in the new union of the spouses.

None of the studies discussed here explicitly studied whether cohabiting of the mother with the father of the illegitimate child did have an effect on survival. Brändström suggested that having a husband-to-be in the same parish produced higher survival but argued that this finding could hardly be used as proof for the effect of cohabitation. Consensual unions in most countries of Europe were strongly disapproved of socially and were consistently opposed. Studies in developing countries today typically have found that children of consensual unions—those lacking official legal sanction—have higher mortality than children of legal unions, proving in a crude way that simple legal procedures sometimes can have important health effects. Carvajal and Burgess, who found that infant mortality was higher among the consensually united in Bogota, Caracas, and Rio de Janeiro, suggested that the degree of mortality differential varied directly with the degree of negative sanction against consensual unions that prevails in a country.⁶⁶ Desai explained the excess mortality in consensual unions by differences in the degree of anticipation of marital dissolution; if one expects that consensual unions are less enduring than formal marriages, it seems likely that one or both partners would choose to hold on to their personal income and invest less in the marriage and children than partners in unions based on a greater degree of commitment.⁶⁷ Bledsoe showed that when parents were not married, the father in such a relationship was much less likely to contribute support, and the children were breast-fed for a shorter period.⁶⁸ There is an interesting parallel here with recent studies documenting health differences between married and cohabiting men and women.⁶⁹

The results presented in this overview have confirmed the need for a research focus that transcends the physical boundaries of the household. The Swedish, Scottish, and Italian studies and, in a less convincing way, the Dutch study have shown that family links, and not only living arrangements of the family as such, were an important determinant of children's survival among orphaned as well as illegitimate children. A mother's and father's ability and motivation to exploit the resources of members of the wider family had a strong effect on the health status of the children. The child's health, although more or less given by their parents'—usually their mother's—marital status, thus could be influenced by the family's and individual's position inside the larger kin-

ship network. Support provided by grandparents of the children or the extended family in general might help to account for survival of infants who might otherwise have died.

Economic buffers protecting the widow and the child also played a role but one that was not yet clear and not well researched. First of all, the role of collective welfare support arranged by charitable organizations is not yet clear. The Scottish study showed, be it in an impressionistic way, that collective welfare support arranged by the parish either to supplement extended household care or to aid lone unmarried mothers was an important factor. Studies using information on the socioeconomic position of the family and the child showed contrasting results: the Italian study on orphans showed a positive relation between socioeconomic status and survival, whereas for the Swedish illegitimate children, the opposite was found.

Another important restriction of most of the studies discussed here is that they are based on a restricted-time perspective. How the role of fathers and mothers has changed over time in response to economic, political, cultural, and social change and how this has affected the chances of survival of children growing up in fatherless or motherless families has been completely neglected. From the middle of the nineteenth century on, the home more and more became the sphere of women, and within this sphere, there was growing resistance by males to participation in day-to-day domestic activities. This made women wholly responsible for the organization of household affairs, child care, and arranging the family's social life. Men were left with breadwinning as their only clear-cut family role.⁷⁰ The loss of the father's child-rearing function, the increased mother-child attachment, and the taking over by governments of various family functions that had traditionally been held by the father might have changed the relative importance of fathers and mothers for the survival of children, but these aspects can only be studied over a longer time perspective.

Most historical studies of the health effects of growing up in an incomplete family have been restricted to the study of short-term effects. Only the Dutch studies give some very limited information on duration aspects and include information on children older than age one. Illegitimate children seemed to experience relatively few negative long-term consequences of their legal status, for being born as an illegitimate child did not have an effect on mortality after age one. For orphaned children, effects of the loss of the parent disappeared after relatively short durations since the death of the parent. Two studies used the mean height at age eighteen as an indicator for the presence or absence of long-term health effects of the family situation on children. In a mid-nineteenth-century sample of children born in The Hague, the proportion of undersized conscripts and the mean final height for illegitimate children did not deviate significantly from that of legitimate children.⁷¹ Horrell and her colleagues published data on stature from the Marine Society records, relating to nineteenth-century Britain. They showed that even in a group of highly disadvantaged recruits, those who gave their mother as their nearest relative were significantly shorter than the rest.⁷²

It comes as no surprise that at a time when the life-course perspective on health has grown in popularity, the long-term effects of early family life circumstances on adult health problems have attracted much attention by epidemiologists. In several recent studies, they observed significant effects of family disruption during childhood on subsequent health. Lundberg, for example, using retrospective reports on a sample of the Swedish population born between 1906 and 1951, found that living with only one parent up to age sixteen was significantly associated with self-reported poor health in

adulthood. The association with adult mortality during the period 1981 to 1984 was in the same direction but was not significant.⁷³ Schwartz, investigating adult mortality among a small selective sample of children born in California about 1910, observed that children of divorced parents had a mortality risk that was 30 to 40 percent higher than that of other children. Preston, Hill, and Drevenstedt investigated the social and economic circumstances in childhood that could predict the probability of survival to age eighty-five among African Americans.⁷⁴ Survivors and a control group were linked to their records in the U.S. Censuses of 1900 and 1910. In a multivariate analysis in which socioeconomic characteristics of the family were included, it appeared that children living without their parents had a significantly lower probability of survival than those living in households headed by fathers. Children living in households headed by their mothers had slightly higher probabilities of survival than those with father heads, but this advantage disappeared when the mother was unmarried. When the analysis was confined to only those households in which a mother was present, survival chances were significantly lower when the mother was unmarried. Vågerö, Leon, and Modin showed that men born to unmarried mothers in Uppsala in the beginning of this century had a higher ischaemic heart disease mortality than men born to married mothers, even after controlling for a number of biological and social factors at birth and later in life.⁷⁵ The life-course approach, of which a few examples have been cited here, might act as a stimulus for further research and as a unique opportunity for close cooperation between historians and epidemiologists. Historians interested in this approach do not have to limit themselves to the provision of data and historical insights to epidemiologists. Historical research still has a value of its own. It is true that historical data usually do not provide much information on biomedical variables influencing the health of children living in one-parent families, yet the clustering of negative health outcomes in certain groups, defined for example by socioeconomic status or the presence of kin, might provide important clues about the etiology of ill health and premature death and about the role of men and women, the family, and the kin network in society.⁷⁶

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47. Beekink, van Poppel, and Liefbroer, "Surviving the Loss of the Parent."
48. Kornin, "Child Maltreatment"; Silverman and Worden, "Children's Reactions to the Death."
49. Åkerman, Högberg, and Andersson, "Survival of Orphans."
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