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SHEA OSCAR RUTSTEIN

Infant and Child Mortality: Levels, Trends and Demographic Differentials

Revised edition

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The World Fertility Survey (WFS) is an international research programme whose purpose is to assess the current state of human fertility throughout the world. This is being done principally through promoting and supporting nationally representative, internationally comparable, and scientifically designed and conducted sample surveys of fertility behaviour in as many countries as possible.

The WFS is being undertaken, with the collaboration of the United Nations, by the International Statistical Institute in co-operation with the International Union for the Scientific Study of Population. Financial support is provided principally by the United Nations Fund for Population Activities and the United States Agency for International Development. Substantial support is also provided by the UK Overseas Development Administration.

For information on Country Reports, WFS publications, and WFS depository libraries, write to the Publications Office, International Statistical Institute, 428 Prinses Beatrixlaan, PO Box 950, 2270 AZ Voorburg, Netherlands. For information on the WFS generally, write to the Information Office, World Fertility Survey, International Statistical Institute, 35-37 Grosvenor Gardens, London SW1W 0BS, UK.

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El proyecto está a cargo del Instituto Internacional de Estadística, contando con la colaboración de las Naciones Unidas y en cooperación con la Unión Internacional para el Estudio Científico de la Población. Es financiado principalmente por el Fondo de las Naciones Unidas para Actividades de Población y por la Agencia para el Desarrollo Internacional de los Estados Unidos. La Oficina Británica para el Desarrollo de Países Extranjeros proporciona también un gran apoyo financiero.

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Revised edition

SHEA OSCAR RUTSTEIN
WFS Central Staff

Editorial note
The present report is an extension of an earlier cross-national summary, 'Infant and Child Mortality: Levels, Trends and Demographic Differentials', published in 1983 as *WFS Comparative Studies* no 24. The present work complements the earlier report.

The recommended citation for this publication is:

Rutstein, Shea Oscar (1984). Infant and Child Mortality: Levels, Trends and Demographic Differentials. Revised edition. *WFS Comparative Studies* no 43. Voorburg, Netherlands: International Statistical Institute.

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Preface

One of the main objectives of the WFS programme was the collection and dissemination of internationally comparable data on human fertility, obtained through nationally representative interview surveys carried out in a large number of countries. Many institutions and research workers at international and national levels are engaged in cross-national comparative analysis of the data collected. The WFS London headquarters also undertook comparative analysis such as cross-national summaries.

The cross-national summaries present basic results from WFS surveys in developing countries on a wide range of topics. These summaries are published in the *WFS Comparative Studies* series.

Several of the cross-national summaries are concerned solely with providing detailed and systematized information on the comparability, or lack thereof, of the field procedures, survey characteristics, questionnaire content and wording and content of the First Country Reports (*WFS Comparative Studies* nos 1–5 and 32). Such detailed appraisals constitute an essential reference base for anyone using WFS data for comparative analysis.

Other cross-national summaries present comparable results from as many surveys as possible on a wide range of specific topics. Each summary provides, in addition to tabular material, a brief accompanying text, which draws attention primarily to any non-comparability of the data and to any obvious interpretational pitfalls to which the tables may be subject. Furthermore, although these summaries are not intended to be analytic in their orientation, some brief highlighting of the major noteworthy differences and similarities is included.

A first group of topical cross-national summaries based upon data from 19 countries for which the First Country Report and standard recode tapes were available early in 1980 is near completion with the publication of twelve volumes (*WFS Comparative Studies* nos 6–15, 17 and 19). A second group of cross-national summaries based upon data from 28 developing countries, with Africa being represented for the first time, is also now nearing completion.

The cross-national summaries are intended to assist analysts and policy-makers by providing a ready tool for comparison of data between countries, but at the same time they draw attention to the limits, if any, of such comparability. It is intended to update and rationalize issues in both groups of summaries so as to cover all developing countries participating in the WFS programme.

The present report is part of this final series, and updates report no 24, so that all 41 countries where surveys were completed are now covered.

HALVOR GILLE
Project Director

1 Introduction

1.1 PURPOSE OF THE STUDY

The level of infant mortality is widely used not only as a demographic measure, but also as an important indicator of the level of health in a society and indeed of its living standards in general. It is thus of importance when a cross-nationally comparable set of measures of infant and early childhood mortality can be made available.

Reliable comparative information on current levels and trends of infant and child mortality for many developing countries did not exist before the World Fertility Survey (WFS). The information which did exist was mainly based on very questionable vital registration statistics or on indirect techniques, which make assumptions about the age pattern and trends of mortality and fertility. Moreover, very little was known about differentials in infant and child mortality in developing countries. The information provided by the World Fertility Survey has begun to fill these gaps.

This study updates results on infant and early childhood mortality presented by the author in *WFS Comparative Studies* no 24 by including similar data for 12 additional countries. To facilitate comparisons the previously presented results for 29 countries are included in the summary tables in the main text, but detailed tables are presented for only the newly included countries. The statistics presented are the probabilities of dying between birth and exact ages one, two, and five ($_1q_0$, $_2q_0$, $_5q_0$), and between ages one and two ($_1q_1$) and two and five ($_3q_2$). Additionally, the infant mortality rate is divided into its neo-natal and post-neonatal components.

In the rest of section 1 the sources and quality of the data used in this study are discussed. Section 2 presents the methodology for calculating the mortality statistics. The basic (detailed) tables included in the appendix are described in section 3, and some summary findings are presented in section 4. Appendix A presents tables for each new country on infant and child mortality rates by selected demographic variables. The denominators for the rates (children-years of exposure) are also shown.

1.2 DATA USED IN THE STUDY

The 41 countries whose data are included in this cross-national summary are the following: in Africa, *Benin, Cameroon, Egypt, Ghana, Ivory Coast,* Kenya, Lesotho, *Mauritania, Morocco, Nigeria,* Senegal, Sudan (North only), and *Tunisia*; in the Americas, Colombia, Costa Rica, the Dominican Republic, *Ecuador,* Guyana, Haiti, Jamaica, Mexico, Panama, Paraguay, Peru, Trinidad and Tobago, and Venezuela; in Asia, Bangladesh, Fiji, Indonesia (Java and Bali), Jordan, Korea (Republic), Malaysia (Peninsular), Nepal, Pakistan, Philippines, Sri Lanka, Syria, Thailand, Turkey and *Yemen Arab Republic,* and in Europe, *Portugal.* (Newly included countries are noted in italics.) A report by Singh (1984) contains detailed information on characteristics of the surveys for all of the countries included here.

1.3 TYPES AND SOURCES OF DATA

The national fertility surveys conducted as part of the WFS programme collected information on survival of children in a variety of formats. In the household survey, questions were asked about the number of children ever born and the number of living children. In some countries, the household survey also contained questions on the survival status of the last child or deaths that had occurred in the household within the last year. These questions could have been answered by any adult member of the household.

The individual survey asked questions directly of the mother about the number of her children, ever born and surviving, by sex. Additionally, a birth history was collected which asked about the sex, date of birth, whether the birth was multiple, and age at death (if applicable) of each of her children.

Infant and child mortality may be measured indirectly from the information provided by the numbers of children ever born and living from either the household or the individual survey. Mortality can be calculated directly from the information in the birth history. The present study uses only direct calculations of mortality measures based on the birth history.

1.4 SPECIFIC QUESTIONS ON DATES

Date of birth

The basic question used to obtain the date of a live birth was, 'In what month and year did your (first, second . . .) birth occur?' If the respondent did not know the answer, she was asked how many years ago the birth occurred. A few countries used additional probes: for example, Nepal also asked the age of the mother at the birth and the current age of the child, and if the month of birth was unknown, the season of birth or the nearest holiday was asked. For all births, the questionnaire for Indonesia asked about the interval since the previous birth or first marriage. The Korean questionnaire used a series of questions involving year and month, animal year, lunar month, and season. Table 1 shows the types and order of questions used for each country.

Table 1 Questioning procedure used to obtain date information on births and deaths

Country	Question ordering							
	Child's birth date				Child's death date			
	1st	2nd	3rd	Int.	1st	2nd	3rd	Coding
Africa								
Benin	ae	ae	ae	ae	ae	ae	ae	1
Cameroon	j	j	j	Y	j	j	j	1
Ghana	1	2	3	Y	3	—	—	1
Ivory Coast	ae	ae	ae	ae	ae	ae	ae	1
Kenya	1	2m	—	—	3	—	—	1
Lesotho	1s	2c	3c	—	3	—	—	1
Nigeria	ae	ae	ae	ae	ae	ae	ae	1
Senegal	ae	ae	ae	ae	ae	ae	ae	1
Egypt	ae	ae	ae	ae	ae	ae	ae	1
Mauritania	ae	ae	ae	ae	ae	ae	ae	1
Morocco	ae	ae	ae	ae	ae	ae	ae	1
Sudan (N)	1	3	—	—	3	—	—	1
Tunisia	3c	1sc	2	Y	1	—	—	1
Asia and Pacific								
Jordan	1	2	—	—	3	—	—	1
Syria	1	2	—	—	3	—	—	1
Turkey	ae	ae	ae	ae	ae	ae	ae	1
Yemen AR	ae	ae	ae	ae	ae	ae	ae	1
Bangladesh	1	2	—	—	1	—	—	1
Nepal	1s	4	2,5	Y	1c	2c	—	1
Pakistan	1s	2	—	—	2u	—	—	2
Sri Lanka	1	2	—	—	3	—	—	2
Fiji	1	2	—	—	4	—	—	1
Indonesia	ae	ae	ae	ae	ae	ae	ae	2
Korea, Rep. of	k	k	k	—	1sh	3	7	1
Malaysia	1ad	2	—	—	1d	3	—	1
Philippines	1	4	—	Y	1c	5c	6	1
Thailand	1	2	—	—	3	—	—	2
Americas								
Colombia	1	2	—	—	3	—	—	2
Ecuador	1	2	—	—	3	—	—	4
Paraguay	1c	2c	—	Y	5	—	—	3
Peru	1	2	—	—	3	—	—	2
Venezuela	1c	2c	—	Y	5	—	—	3
Costa Rica	1	2	—	—	3	—	—	2
Dom. Rep.	1c	2c	—	Y	5	—	—	3
Mexico	1c	2c	—	Y	3	—	—	2
Panama	1	2	—	—	3	—	—	2
Guyana	1	2	—	Y	1	7	—	1
Haiti	1c	4c*	—	—	3	—	—	1
Jamaica	1	2	—	Y	1	7	—	1
Trin. and Tob.	1	2	—	Y	1	7	—	1
Europe								
Portugal	1	—	—	Y	1	—	—	1

Key to questions

The numbers in the table refer to the questions contained in the questionnaire, as indicated below. The ordering means that if an answer was not given to the first question, then the second and then the third questions were asked as probes. The letters and symbols refer to country specific modifications.

ae These countries used an age-event chart. In obtaining the information required by the questionnaire, the interviewer necessarily referred to events other than the one in question.
c These questions were always to be asked and the responses made consistent during the interview.
d The day of the month was also asked.
s If calendar month was not known then the season was asked.
h If calendar month was not known then the nearest holiday was asked.

Child's birth date

Int. = A 'Y' indicates that births and other pregnancies were integrated into a single history. Otherwise, they were separated into a live birth history and an 'other pregnancy' history. In the latter case only, stillbirths were probed for 'any sign of life'.
1 = Calendar year and month of birth.
a = Animal year also asked for Chinese population.
2 = How many years ago (ie before the interview).
m = Both years and months ago were asked (Kenya).
3 = The interval since the last birth.
4 = The current age of the child (living children only).
* = Also if the child had died, then age he would have been (Haiti).
5 = Age of the respondent (mother) at the birth.
j = For Cameroon, calendar year and month, the age of the mother at the birth, the interval since marriage or the previous birth (plus unit used) and the living child's current age (plus unit) were always asked, but the interviewer was not required to make them consistent. If the calendar was not known, then how long ago the birth occurred was asked (plus unit).
k = For Korea, age of the respondent at the birth, the animal year, the calendar year, month and day, and whether a solar or lunar calendar were all asked. If the calendar month was not given, then the season was asked.

Child's death date

1 = Calendar year and month of death.
2 = Age at death (or how long child lived) in days, weeks, months and years.
u = The period was unspecified in the question (Pakistan).
3 = Age at death in years and months.
4 = Age at death in months if less than 1 year, in years only if more than 1 year.
5 = Age at death in completed years only.
6 = Categories (<1 year, 1–4 years, 5+ years).
7 = How many years ago did child die.
Month, then season, then nearest holiday.
j = For Cameroon, the age at death (plus unit), the number of years ago the child died, and the calendar year and month were always asked but the interviewer was not required to make them consistent.

Coding for age at death

The methods of coding specified below refer only to deaths occurring at ages below five years. Additional variations exist for deaths at ages five and over. The methods are those used for the original coding from the questionnaires which have not been changed in constructing the standard recode data files.

1 = Age at death in completed years and months.
† = Most deaths at 0 months were mistakenly coded as 1 month (Fiji).
2 = Grouped age at death: 0, 1–2, 3–5, 6–11, 12–23, 24–59 months.
3 = Grouped age at death: 0–11, 12–23, 24–35, 36–47, 48–59 months.

Age at death

If a child had died, the respondent was asked 'How old was he/she when he/she died?' or 'What was the year and month of his/her death?' For all but three countries where age was asked the interviewer was to obtain the age in completed years plus completed months. In the Dominican Republic, Paraguay and Venezuela only age in completed years was obtained. However, several countries grouped the data for coding into broader categories: '0 months', '1–2 months', 3–5 months', '6–11 months', '1 year' and '2–4 years completed'. Moreover, the codes for Fiji group together deaths at 0 and 1 months.

1.5 QUALITY OF THE DATA

Although it is likely that the data relating to infant and child mortality from the WFS surveys are in general as good as any ever obtained on a national level for the developing countries, they may still suffer from several deficiencies which could lead to biased interpretation of the results. The errors which may be present are omissions of births and deaths, misreporting of dates of birth and ages at death, and misreporting of the mothers' own birth dates.

The omission of vital events is the most serious error that may be present. It is usually thought to occur more frequently for children who are no longer living with their mother – children living away and children who have died – and especially for women with many children or whose children died several years before the survey. Additionally, there is a problem of definition as regards children who died at very young ages, say within a few hours of birth, since they may not have been considered live births.

Misreporting of birth dates may alter trends in mortality, especially if the misreporting varied according to whether the child was living or not at the time of the survey. The misreporting of birth dates can take two forms: a preference for certain terminal digits (also known as heaping) or a wholesale transfer of the birth date. The first form is not so much of a problem as the latter, but is generally thought to be more prevalent. Tabulations done for several countries (not shown) did not reveal substantial differential heaping of birth dates.

Misreporting of the age at death is especially serious for certain measures of mortality, such as the infant mortality rate and the neo-natal mortality rate. A tendency to prefer certain terminal digits and round ages at death would particularly bias these measures, since the risk of mortality changes rapidly with age.

Even though several countries coded both years and months for age at death, it is evident that many respondents whose child died aged one year or older declared only the number of whole years completed and did not provide (or perhaps were not asked about) the additional number of months. To check on the extent of heaping of ages at death, tabulations were made for countries which coded age at death in both years and months (see table 2). The results of these tabulations show that, except for Korea, there is moderate to severe heaping of ages at death, especially for ages 12 months and over.

Table 2 Digit preference in reporting age at death

Country	Per cent of deaths 0–30 at given months		Per cent of deaths 0–60 at 6, 12, 18, 24, 30, and 36 months	Single-month age ratios	
	12	24		12	24
Africa					
Benin	11.8	11.5	37.0	13.9	78.6
Ghana	9.7	10.5	32.1	8.6	32.3
Ivory Coat	11.5	9.7	29.9	12.1	744.0
Kenya	9.8	8.0	29.7	11.2	48.2
Lesotho	9.4	5.6	22.2	10.5	38.2
Senegal	6.9	6.2	22.1	3.8	5.5
Egypt	10.7	7.2	34.1	12.3	71.7
Mauritania	16.2	20.3	44.7	28.8	112.9
Morocco	15.2	9.8	32.1	23.6	96.0
Sudan (N)	14.2	11.1	36.7	17.6	138.0
Tunisia	12.1	5.9	32.8	10.7	101.6
Asia and Pacific					
Jordan	10.8	4.6	26.8	11.9	40.8
Syria	10.7	6.8	27.3	15.6	47.0
Turkey	9.2	3.9	27.6	13.6	72.0
Yeman AR	12.3	8.8	30.0	33.9	273.4
Bangladesh	8.2	7.6	29.5	19.4	163.4
Nepal	5.6	2.2	13.3	2.5	2.3
Fiji	8.0	3.9	17.4	12.7	*
Korea, Rep. of	3.0	1.4	8.5	1.3	1.1
Malaysia	5.7	6.2	22.9	6.3	59.5
Philippines	3.9	1.5	10.6	1.6	1.5
Americas					
Guyana	5.4	0.8	10.4	2.7	2.8
Haiti	7.4	11.4	28.2	8.4	98.0
Jamaica	7.1	1.8	13.4	3.5	5.3
Trin. and Tob.	1.5	0.6	5.2	1.2	2.4
Europe					
Portugal	3.2	0.5	8.4	3.8	2.0

NOTES:
Single-month age ratio defined as $\frac{4 \times Dm}{(D_{m-2} + D_{m-1} + D_{m+1} + D_{m+2})}$

* No deaths in neighbouring months.

One question raised by this table is whether deaths at ages 12 and 24 months should be partially allocated to the first and second years of life, respectively. From the pattern of the distributions, we believe that most of the heaping on these months is due to women correctly stating that the child had completed one or two years, but not indicating the number of months beyond that first or second birthday. Consequently there should be no re-allocation of deaths to other ages, but beyond 11 months the data should be grouped into whole years. We also decided that, to reduce the effects of heaping for deaths at ages below one year, the ungrouped data should be grouped into the categories 0 completed months of age, 1–2 months, 3–5 months and 6–11 months, as was done for the countries with coded ages at death.

Tabluations were run for the countries with the least heaping, using both the grouped and ungrouped data. These tabulations (not shown) revealed that the effect of this grouping was negligible.

Missing data for age at death can also be problematic: it is known that the child died but not at what age. In a recent comparative analysis of the quality of the WFS data for infant and child mortality estimation (Rutstein 1984), less than 2 per cent of ages at death were missing in 22 of the 29 surveys with ungrouped data. The highest percentages missing occurred in Benin, Haiti and Lesotho where about 6 per cent of deaths had no age at death. About 10 per cent of deaths in Egypt and Tunisia did not have information on the number of completed months of age although most of these did have information on the number of completed years. It thus appears that most missing information was due to either not recording years when the child died below one year of age or to not recording month if the child died at one year of age or above. In order to be able to use the knowledge that the child had died, the assumption was made that missing years and missing months were actually those valued zero and were accordingly recoded as such. We feel that this assumption is the most reasonable and leads to the least amount of bias.

Evidence from studies evaluating the quality of the demographic data which were carried out for many of the countries included here has revealed that the data relating to mortality are free of substantial error and are better than the vital statistics. Some studies concluded that there was some mistatement of age at death, but not always in the same direction (see Al-Tohamy, forthcoming; Gueye 1984; Guzmán 1980b; Mott 1982; Singh 1982; Suprapttilah 1982; Tardieu 1984; Vielma 1982; and Yatim 1982). In only a few countries has there been evidence of substantial omission: Jordan (Abdel-Aziz 1983), Mauritania (Cheikh 1984), Sudan (Rizgalla, forthcoming) and Yemen (Al-Tohamy, forthcoming). For the Dominican Republic, working with only one survey, Guzmán (1980a) concluded that mortality reported in the survey for earlier than 1960 was substantially affected by omission. However, a later study comparing the rates with those of a succeeding survey, confirmed that a real rise in mortality had occurred, at least between 1955 and 1960 (see Hobcraft and Rodríguez 1982).

2 Methodology or Rates Calculation

2.1 SELECTION OF TIME-RELATED SPECIFICATIONS

Infant and child mortality measures may be specified by any two out of three time-related variables: the child's birth cohort, his/her age when exposed and the time period of exposure. Since the date of birth plus the age equals the time period, any combination of two of the variables will fully specify the measure with regard to time. For most of the tables in this study, we have chosen to use the age–period combination, and the calculation of synthetic cohort probabilities of death. The reasons for using the synthetic cohort measure are as follows:

1 Age is obviously the most important time factor related to mortality.
2 Use of synthetic cohorts permits the calculation of probabilities of death for the periods of time closest to the date of the survey. Conversely, not all children born recently have been exposed during the entire age range covered by the mortality measures, so that real cohort probabilities cannot be calculated for recent births.
3 The probability of dying appears to be more affected by period-related events such as wars, famines and epidemics, which affect all or several cohorts simultaneously, rather than by factors specific to a given cohort only.

2.2 CALCULATION OF SYNTHETIC COHORT PROBABILITIES OF DEATH

As discussed above, different schemes have been used in the standard recode data sets for coding age at death. To begin our calculations, we first standardized the codes (where possible) to the following groupings of age at death: less than 1 completed month, 1 and 2 months, 3–5 months, 6–11 months, 1 year, 2 years, 3 years, 4 years, and 5 or more years (not considered for this study). There had to be several exceptions to this rule. The Dominican Republic, Paraguay and Venezuela recorded age at death in completed years only and were coded 'less than 1 year' as the first group. Several countries combined '2–4 years' as a single group, Ecuador used the group '3–11 months' and for Fiji 'less than two completed months' was taken as the first group.

Modifying the procedure used by Somoza (1980), described in his appendix B, the probabilities of death are built up from probabilities calculated for the sub-intervals of exposure defined by the codes. The probability of death is the result of dividing the number of deaths occurring between the age limits given by the relevant code to children who were exposed to death within the period, by the number of children exposed.

Referring to figure 1, more specifically we have three groups of children who are exposed to death between ages a and b during the time period t to t′: children born between t–a (age a at time t) and t′–b (age b at time t′), children born between t–b and t–a, and children born between t′–b and t′–a. Children in the first group were exposed during the entire period in question, while children in the latter groups have been exposed only during part of that period. Due to the short length of the sub-intervals used to code age at death, we can safely assume that one-half of both the deaths and the exposure occurred within the relevant period. The numerator thus becomes the sum of all deaths at ages a to b occurring to children born between t–a and t′–b plus one-half of the deaths to children born between t–b and t–a or between t′–b and

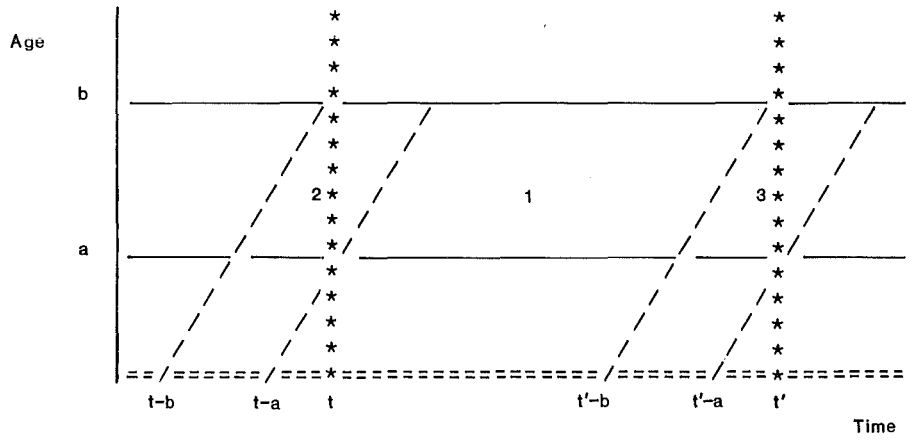

Figure 1 Cohorts used to calculate synthetic rates

t′—a. Similarly, the denominator becomes the number of children born between t—a and t′—b who survived to age a plus one-half the number of children born between t—b and t—a or between t′—b and t′—a who survived to age a.

An exception to the procedure must be made for the period immediately before the survey since all deaths recorded for children exposed during this period must have occurred before the date of the survey. Therefore, all the deaths (rather than one-half) are counted for children born between t′—b and t′—a, although the children have been exposed on average for one-half of the time.

In order to calculate the conventional probabilities of death, which are presented in the tables, we first calculated the probability of surviving through the sub-interval by subtracting the probability of dying (the quotient given above) from one. Then we multiplied together the sub-interval survival probabilities included within the conventional age limits and finally subtracted this product from one to give us the probability of death within the conventional limits:

$$(n)q(x) = 1 - \prod_{i=x}^{i=x+n} (1 - q[i])$$

where $(n)q(x)$ is the conventional probability of dying between ages x and x+n and q[i] are the sub-interval probabilities of dying.

The conventional post-neonatal mortality rate is defined differently from conventional rates. Although it refers to the age interval between one and eleven months (completed), it is not a probability, but rather is the difference between the infant mortality rate (the probability of dying in the first year of life) and the neo-natal mortality rate (the probability of dying in the first month of life).

3 Description of the Tables

There are two types of symbols used in both the summary and the detailed tables. The symbol —, meaning not available, is used where the measure could not be calculated, either due to the lack of an appropriate code in the basic data or due to zero exposure during one of the relevant sub-intervals. Parentheses have been put around a number to indicate that at least one of the relevant sub-intervals had less than 500 children exposed.

The detailed tables in this study are contained in appendix A and are organized into sets by region and country.

Each of the detailed tables shows the following probabilities of death: the neo-natal mortality rate (the first month of life) — NN; the post-neonatal mortality rate (between ages one and eleven months) — P-NN; the infant mortality rate (in the first year of life) — ${}_1q_0$; under age two years — ${}_2q_0$; under age five years — ${}_5q_0$; 'toddler' (between ages one and two years) — ${}_1q_1$; 'child' (between ages two and five years) — ${}_3q_2$; and between ages one and five years — ${}_4q_1$.

For each country, all tables but the last present infant and child mortality for five-year periods of exposure before the survey, according to a classificatory variable.

Table A1 shows mortality of each sex and for both sexes combined for periods before the survey.

Table A2 shows mortality for five-year periods before the survey, according to mother's age at birth in four groups, less than 20 years, 20–29, 30–39 and 40 or more years.

Table A3 shows the numbers of children exposed in each period during each of the sub-intervals of exposure, which form the bases for the calculations of the sub-interval probabilities.

Table A4 shows mortality by birth order (first, second or third, fourth to sixth, and seventh or higher).

Table A5 shows mortality according to the length of the birth interval between the child under consideration and his/her next oldest sibling (called previous birth interval) grouped into less than 24 months, 24–47 months and 48 or more months between births. The first born, having no previous birth interval, and children of multiple births have not been included in these two tables. This table has separate panels for all children regardless of the survival status of the next oldest sibling, and for the subset of children whose next oldest sibling survived to the date of their birth or at least 24 months (called surviving intervals).

Table A6 shows mortality rates for five-year periods for children of single and multiple births.

Table A7 shows infant and child mortality for each sex and both sexes combined for five-year calendar periods from 1945–9 to 1975–9. Since many surveys occurred before 1980, mortality probabilities are shown for the 1975–9 period only if the survey took place after 1977.

Table A8 is different from the rest of the tables presented in this study since the probabilities of death are based on real rather than synthetic birth cohorts. Mortality is shown for both sexes combined, according to five-year periods of birth (rather than exposure) before the survey. As pointed out in the section on methodology, not all recently born children have been exposed for the full time implied in the age ranges of the probabilities. Accordingly, only children born at least one year before the survey are used to calculate the infant mortality rates, only those born two or more years before are used for ${}_2q_0$, and only those born at least five years before are used for the probability of dying before age five, ${}_5q_0$. Since ${}_1q_1$ is calculated using ${}_1q_0$ and ${}_2q_0$, fluctuations in the mortality of children born one year and two years before the survey may cause strange values to result.

4 Summary of Findings

The summary tables included in the text have been designed for comparison between the surveys included. The countries are listed in the order of decreasing mortality before age five in the five-year period immediately preceding the surveys.

4.1 RECENT LEVELS OF INFANT AND CHILD MORTALITY

Table 3 presents recent levels of infant and child mortality, or more specifically the probability of dying during infancy and early childhood for the period 0–4 years before the date of each survey (shown graphically in figure 2). The measures presented for infancy are the infant mortality rate (the probability of dying before reaching the first birthday, ${}_1q_0$), the neo-natal mortality rate (the probability of dying in the first month of life) and the post-neonatal mortality rate (deaths between the second and twelfth months of life divided by the number of births). The measures for mortality in early childhood are the toddler mortality rate (the probability of dying at age one, ${}_1q_1$) and the child mortality rate (between ages two and four, ${}_3q_2$). As an overall summary measure, the under-five mortality rate (the probability of dying between birth and exact age five, ${}_5q_0$) is also shown.

The variation in levels of mortality is very great. Panama and Portugal, in this study the countries with the lowest levels of mortality, have fewer than one in twenty children die before reaching age five years compared with more than one in four for Senegal, a variation of more than five to one. However, even the mortality levels of Panama and Portugal are substantially above the levels of the developed world. For example, at about this time Japan had 9 infant deaths per 1000 births, the United States 16 and England and Wales 14 (United Nations *Demographic Yearbook 1978* 1979), compared with 33 for both Panama and Portugal.

Classifying countries into groups according to their level of under-five mortality results in the following:

Countries grouped by level of under-five mortality (percentage of children dying before their fifth birthday)

Moderate (4–8%)	Moderate to high (8–12%)	High (12–15%)	Very high (16–20%)	Extremely high (20% or more)
Costa Rica	Colombia	Dom. Rep.	Cameroon	Bangladesh
Fiji	Ecuador	Ghana	Egypt	Benin
Guyana	Mexico	Indonesia	Haiti	Nepal
Jamaica	Paraguay	Kenya	Ivory Coast	Pakistan
Jordan	Philippines	Morocco	Lesotho	Senegal
Korea, Rep.	Sri Lanka	Peru	Mauritania	Yemen AR
Malaysia	Syria	Sudan (N)	Nigeria	
Panama	Thailand		Turkey	
Portugal	Tunisia			
Trinidad & Tobago				
Venezuela				

The results from the WFS surveys indicate higher levels of infant and child mortality in most countries than had been indicated previously. Table 4 compares the infant mortality rates from the WFS surveys with those given by the United Nations *Demographic Yearbook 1978* (1979) (also shown in figure 3). In order to compare the rates, we have taken the WFS values from the period encompassing the year of the *Yearbook* value. In only three countries, Ecuador, Philippines and Portugal is the infant mortality rate lower in the WFS findings than that given in the *Demographic Yearbook* and that is by at most four deaths per 1000 births.

In general the WFS post-neonatal rates are close to those of the *Yearbook,* especially where the WFS rate is lower. Only in Ecuador is the post-neonatal rate from the WFS lower by 10 or more deaths per 1000. However, three countries, Jordan, Peru and Thailand have deficits of 10 per 1000 or more in the *Yearbook* post-neonatal rates.

Yearbook neo-natal rates, on the other hand, show large deficits when compared with the WFS. Only three countries – Malaysia, the Philippines and Portugal – have lower WFS neo-natal rates. This seems to have been caused by the transfer from the neo-natal to the post-neonatal period and is likely to have occurred where date of death was asked in preference to age at death. (The limit of precision for dates was one month so that some neo-natal deaths may have occurred in a different calendar month from that of birth and are thus incorrectly classified as post-neonatal when the birth date was subtracted from death date.)

Several countries seem, on the basis of comparison with the WFS results, to have been misclassified as to the reliability of their vital statistics. Costa Rica and Trinidad and Tobago have been classified as being complete (C), but have discrepancies of 15 per 1000 or more in infant mortality. Four other 'C' countries – Guyana, Jamaica, Pakistan and Sri Lanka – have substantially lower *Yearbook* neo-natal rates than indicated by WFS data. Two countries – Panama and Philippines – which were given 'U' classifications meaning unreliable vital statistics seem to deserve being classified complete in light of the WFS data, and Ecuador also appears to have good vital statistics.

4.2 COMPONENTS OF MORTALITY

It has been observed previously that as infant and child mortality is reduced, the reduction is more rapid for mortality after the first year of life, and within the first year, after the first month. This more rapid reduction has been due to greater control over exogenous causes of death (eg disease), which are more important at older ages, than endogenous causes (eg birth defects), which are more

Table 3 Current levels of infant and child mortality (in the period 0–4 years before the survey)

Country	Date of survey	Infant ($_1q_0$)	NN	P–NN	Under 5 ($_5q_0$)	Toddler ($_1q_1$)	Child ($_3q_2$)
Senegal	1978	111.8	49.6	62.1	262.4	73.9	103.4
Yemen AR	1979	161.5	58.4	103.1	236.5	41.6	50.0
Nepal	1976	142.3	75.4	66.9	234.6	53.7	57.0
Bangladesh	1975–6	135.0	73.7	61.3	221.6	34.6	67.9
Pakistan	1975	139.0	79.9	59.0	207.2	33.1	47.8
Benin	1981–2	107.6	49.7	57.9	204.2	36.7	74.3
Mauritania	1981–2	90.2	47.8	42.4	195.9	45.3	74.3
Cameroon	1978	104.6	45.3	59.3	191.2	40.1	59.0
Haiti	1977	122.7	60.5	62.2	191.1	29.5	49.9
Egypt	1980	132.3	58.7	73.7	190.6	37.1	31.2
Lesotho	1977	125.8	67.6	58.2	173.7	29.0	26.5
Turkey	1978	132.6	63.0	69.6	165.8	22.7	16.0
Nigeria	1981–2	89.8	45.1	44.7	165.3	37.1	47.6
Ivory Coast	1980–1	113.1	54.0	59.2	161.8	17.2	38.4
Indonesia	1976	94.6	47.3	47.3	158.5	26.4	45.4
Sudan	1979–80	78.6	41.5	37.0	150.8	37.5	42.5
Peru	1977–8	96·5	43.8	52.7	149.3	31.3	28.0
Morocco	1980	91·2	50.3	40.9	141.8	30.3	26.2
Kenya	1977–8	86.6	37.8	48.8	141.6	27.9	33.3
Dom. Rep.	1975	88.6	—	—	128.5	25.3	18.9
Ghana	1979	73.4	38.0	35.3	127.2	24.7	34.3
Ecuador	1979–80	75.7	37.6	38.1	117.6	24.8	21.0
Colombia	1976	69.6	33.5	36.2	107.9	18.5	23.0
Tunisia	1978	79.8	38.9	40.9	107.2	16.2	13.8
Mexico	1976–7	71.6	40.9	30.7	96.0	12.5	14.0
Philippines	1978	58.3	24.5	33.7	92.9	15.5	21.6
Thailand	1975	65.1	38.9	26.2	90.9	8.6	19.2
Sri Lanka	1975	59.9	36.9	23.0	86.1	8.2	19.7
Syria	1978	64.6	15.2	49.4	86.1	12.2	10.9
Paraguay	1979	61.2	—	—	84.9	15.1	10.3
Jordan	1976	65.6	27.5	38.1	79.7	9.3	5.8
Guyana	1975	57.6	34.3	23.3	77.2	11.7	9.2
Venezuela	1977	53.1	—	—	63.7	5.5	5.7
Costa Rica	1976	53.3	24.8	28.5	61.3	3.9	4.6
Fiji	1974	47.0	—	—	58.5	5.4	6.7
Korea, Rep. of	1974	41.7	23.0	18.7	56.1	6.9	8.1
Jamaica	1975–6	43.0	23.9	19.1	55.8	8.1	5.3
Malaysia	1974–5	36.1	13.9	22.2	49.8	5.5	8.7
Trin. and Tob.	1977	41.3	30.8	10.5	49.1	2.8	5.4
Panama	1976–7	32.8	20.5	12.3	45.7	5.6	7.9
Portugal	1979–80	33.3	23.3	10.0	36.6	1.8	1.6

NOTES:
1 Rates are expressed per thousand.
2 Countries are ordered by level of under five mortality ($_5q_0$).
3 — indicates that the rate is not calculable.
4 Infant: Mortality between birth and first birthday ($_1q_0$).
NN –neo-natal): Mortality in first month of life.
P–NN (post-neonatal): Mortality between ages one and eleven months.
Under 5: Mortality between birth and fifth birthday ($_5q_0$).
Toddler: Mortality between first and second birthdays ($_1q_1$).
Child: Mortality between second and fifth birthdays ($_3q_2$).

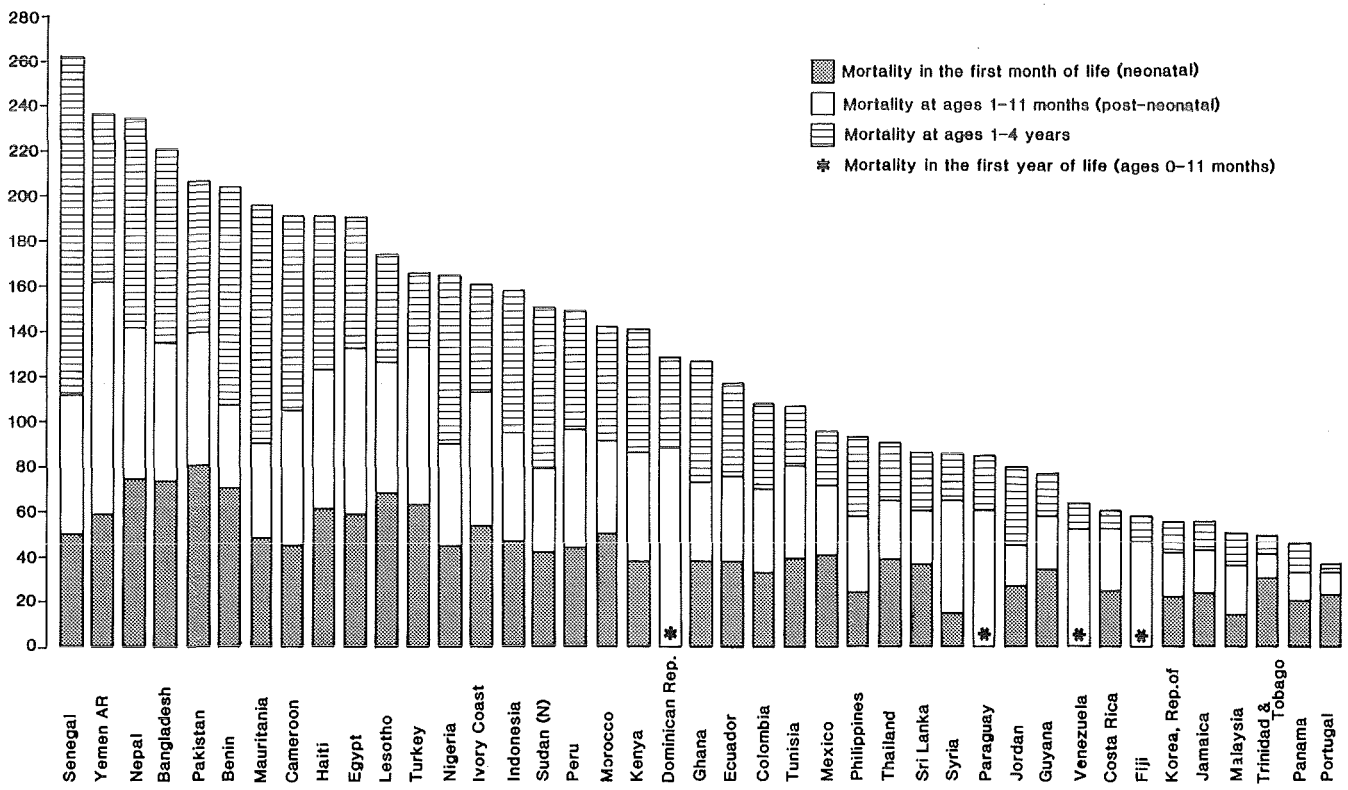

Figure 2 Current levels of infant and child mortality (0–4 years before the survey)

important at younger ages. The rates as presented in figure 2 confirm this finding.

In order to investigate this relationship further, in figure 4 we have plotted the proportions of deaths (calculated using the synthetic mortality rates) occurring in the first month and the first year of life out of all deaths occurring before the fifth birthday, according to the level of mortality before the fifth birthday. There is a clear tendency for the proportions to decline as mortality declines, but there are also substantial deviations from these trends, some of which may be due to errors in reporting age at death or, for those below the trend lines, to omission of some early infant deaths.

4.3 TRENDS

The birth histories of the surveys carried out under the WFS programme contain information which allows the calculation of infant and child mortality rates for the past. However, there are two basic limitations to the use of these rates for the determination of time trends. The first is due to the nature of the data: since only women up to age 49 at the time of the survey were interviewed, information about the mortality of children is limited to those born to progressively younger mothers (at the time of the birth) as the period of interest is further in the past. As will be confirmed below, the age of the mother at birth affects the child's chances of survival and, coupled with truncation, could distort the interpretation of time trends. We have therefore limited our examination of trends to those children born to mothers up to the age of 29 years at birth and for periods up to 19 years before the survey.

The second limitation regards the quality of the data. In general data pertaining to earlier periods are likely to be of lower quality due to the omission of births of children (especially those not surviving or not co-resident at the time of interview), misreporting of the age at death for children who have died, or the exclusion of older women from the interview because of selective age misreporting. Data on children born to mothers less than 20 years old at the time may suffer from deliberate omission and the effects of selectivity due to changing age at first marriage, and therefore we have placed a lower limit of 20 years of age at birth when examining trends over time.

Although infant and child mortality is lowest for women aged 20–29, the trends evident may be largely indicative of the general changes that have occurred in mortality over the last 20 years.

Changes over time

In all the countries covered in this study, infant and child mortality has declined over time.

Table 5 shows the levels of under-five and infant mortality that prevailed during successive five-year periods (up to 20 years) preceding the survey, while table 6 shows the levels of the component rates.

Table 4 Comparison of infant mortality rates, United Nations *Demographic Yearbook* and World Fertility Survey

Region and country	From UN *Demographic Yearbook*					From WFS surveys			
	Year	Code[a]	NN	P–NN	Infant	NN	P–NN	Infant	Period
Africa									
Ghana	1970	U*	31	28	59	35	33	67	5–9
Kenya	1970	U	21	45	66	47	52	99	5–9
Egypt	1973	U	16	82	98	67	75	143	5–9
Tunisia	1973	U	21	42	63	35	39	74	5–9
Americas									
Colombia	1969	U	25	36	61	35	31	66	5–9
Ecuador	1973	U	23	53	76	33	39	72	5–9
Mexico	1973	U	20	32	52	41	31	72	0–4
Paraguay	1971	U	15	24	39	—	—	53	5–9
Peru	1970	U	23	42	65	49	60	109	5–9
Venezuela	1975	U	—	—	44	—	—	53	0–4
Costa Rica	1974	C	18	20	38	25	28	53	0–4
Dom. Rep.	1975	U	21	23	44	—	—	89	0–4
Panama	1975	U	18	13	31	21	12	33	0–4
Guyana	1972	C	27	24	51	34	23	58	0–4
Jamaica	1965	C	17	22	39	28	20	49	10–14
Trin. and Tob.	1975	C	—	—	26	32	11	43	0–4
Asia									
Jordan	1976	U	8	14	22	28	38	66	0–4
Pakistan	1968	C	63	61	124	78	58	136	5–9
Sri Lanka	1968	C	31	19	50	37	22	59	5–9
Malaysia	1975	C	20	13	33	14	22	36	0–4
Philippines	1974	U	30	29	59	24	34	58	0–4
Thailand	1976	U	10	16	26	39	26	65	0–4
Europe									
Portugal	1973	C	21	24	45	18	23	41	5–9

[a]CODE:
C = Vital statistics considered complete.
U = Vital statistics considered unreliable.
* = Registration area only.

For most countries mortality has declined substantially. The average percentage changes to the latest period for the 41 combined with equal weight are:

Mortality rate	To period 0 to 4 from period		
	5 to 9	10 to 14	15 to 19
Infant	– 8%	–17%	–25%
Toddler	–20%	–36%	–46%
Child	–15%	–33%	–51%

However, the declines have not been equal nor even consistent as can be seen in figure 5 and in table 7, which show the change in the level of the rates since the previous period.

In order to facilitate comparisons, in table 8 we have indexed the mortality rates by the level prevailing in the period 0–4 years before the survey.

Changes in under-five mortality

The greatest change in under-five mortality occurred in Ivory Coast, Jordan and Turkey, where the decreases mean that over 18, 14 and 16 per cent more children, respectively, reached their fifth birthday in the five years preceding the survey than did so 10–14 years earlier. The smallest changes occurred in the Philippines and Paraguay, the former showing practically no change and the latter a small and erratic change over time.

Several countries – Bangladesh, Guyana, Jamaica, Mauritania, Nigeria, Pakistan, Paraguay and Sudan –

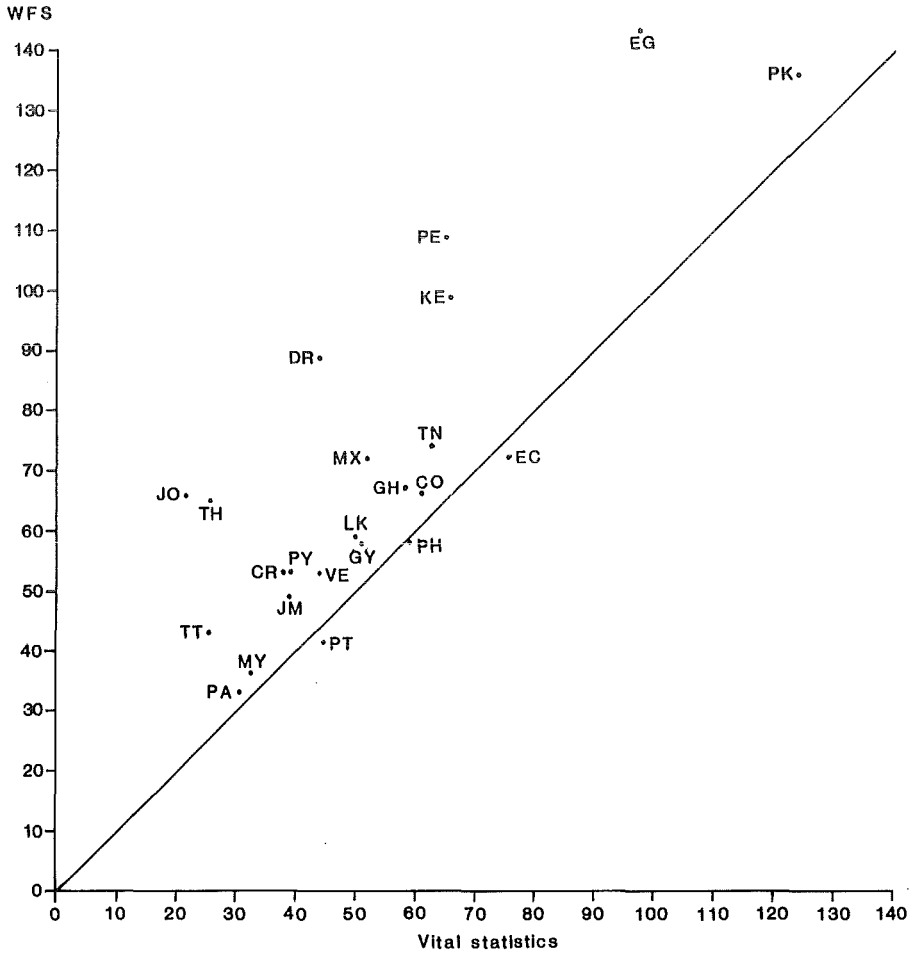

Figure 3 Comparison of infant mortality rates from the WFS surveys with vital statistics reported in the United Nations *Demographic Yearbook 1978*

show increased mortality in the most recent period over that of the period 5–9 years before the survey. For all countries together, the unweighted average decline was 49 fewer deaths per 1000 births in the most recent period compared with 15–19 years ago, ie a fall of about 16 deaths per five-year period. By region, the countries of both Africa and Asia indicate about the same average decrease (59 and 56 deaths, respectively) while the Americas show a lower decline (36 deaths).

Changes in infant mortality

From table 8 we see that 26 countries show infant mortality at least 10 per cent higher 15–19 years ago than 0–4 years ago, and in 26 countries infant mortality has declined by 20 deaths per 1000 or more (table 7). The countries with the largest declines are Benin, Cameroon, Ivory Coast, Jordan and Turkey. Only five of the countries show mortality rates lower in the period 15–19 years ago than in the latest period, three of which appear to be due to deficient data for this distant period. In the other two, the Dominican Republic and Venezuela, infant mortality appears to have risen since then.

Changes in component rates

Table 6 shows the other component rates of mortality below age five years – neo-natal, post-neonatal, toddler and child – for five-year periods of time preceding the surveys. Although most countries show declines in all rates over the whole time period covered, there are exceptions: two countries – Lesotho and Sudan – show higher neo-natal rates in the most recent period than 15–19 years previously; five countries – Haiti, Lesotho, Senegal, Sri Lanka and Sudan – show higher post-neonatal rates; two countries – the Dominican Republic and Paraguay – show higher toddler rates; and four countries – Bangladesh, Guyana, Jamaica and the Philippines – show higher child mortality rates. Some of these apparent rises may be attributable to problems with the data, especially omissions for the period 15–19 years before the survey.

Table 9 shows average (unweighted) declines for the countries grouped by mortality level and for all countries together. On average post-neonatal mortality and child mortality declined by about 17 and 19 deaths per 1000, respectively, while neo-natal and toddler mortality declined about 11 and 12 per 1000 over the approximate fifteen-year span covered in the table. There does seem to

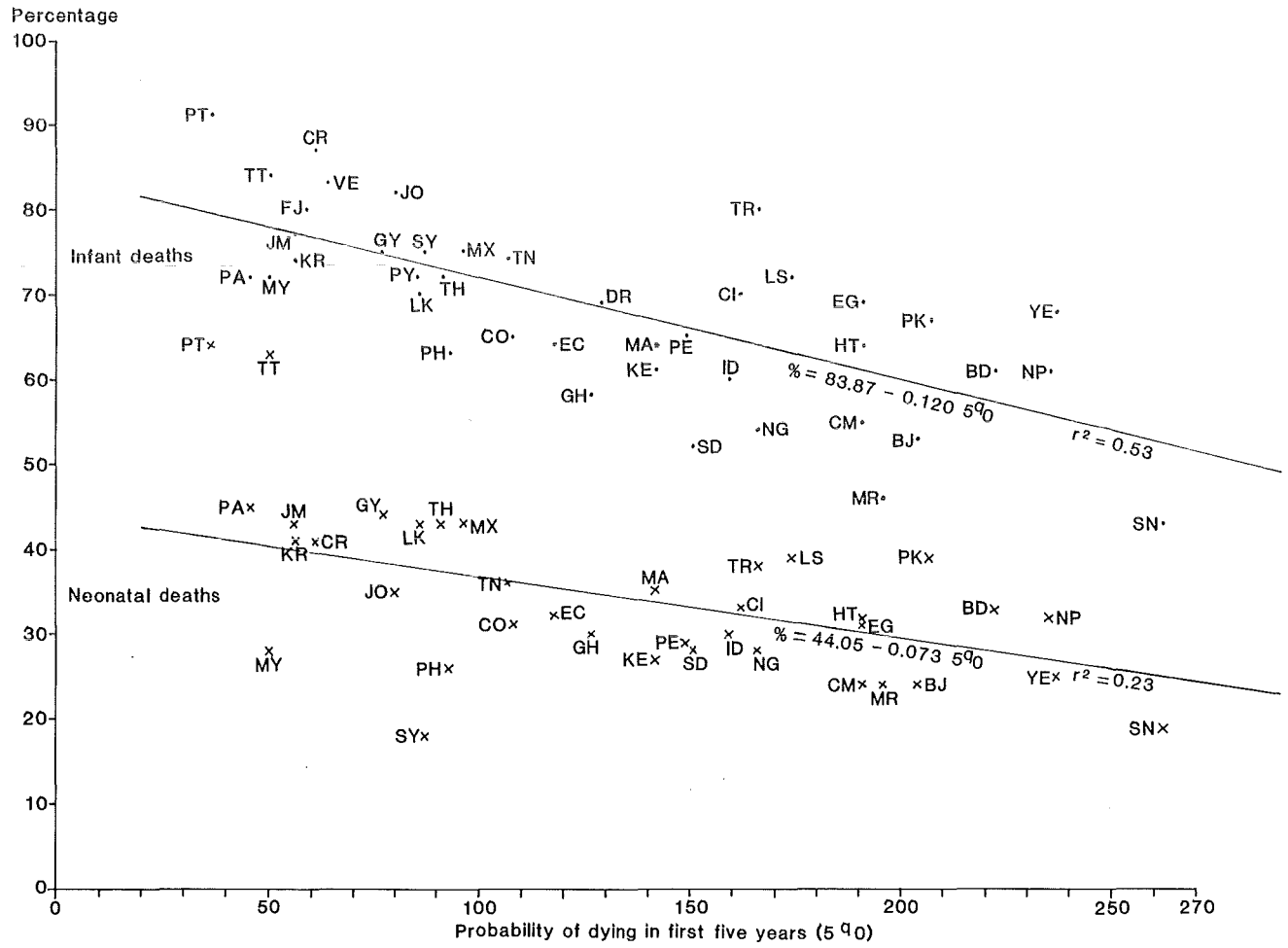

Figure 4 Percentage of deaths in the first month and in the first year out of all deaths in the first five years of life (based on calculated death probabilities), according to the probability of dying in the first five years of life

be a pattern to the declines for toddler and child mortality, but not so for neo-natal and post-neonatal mortality. However, most countries show fluctuating rates around an overall declining trend, and only seven countries have consistent declines in all rates.

4.4 DEMOGRAPHIC DIFFERENTIALS

There are five demographic variables which have a substantial impact on the chances of survival of infants and young children: the age of the mother at the time of the birth, the child's sex and birth order, the interbirth interval, and whether the birth was single or multiple. We will discuss in turn the results of tabulating mortality according to each of these variables. In order to examine results based on as many births as possible while minimizing the effects of truncation of the data, in the summary tables we consider only children who were exposed during the period 0–9 years before the survey.

Sex of child

It has been commonly accepted that males have higher mortality than females at all ages, except where maternal mortality is important. The WFS data do show excess male infant mortality in all countries except Jordan and Syria (table 10) which have substantial excess female infant mortality. For all countries combined, male infant mortality is some 16 per cent higher than female. Grouping the countries as before by their level of under-five mortality, some relationship is apparent between mortality level and the infant mortality differential by sex (figure 6).

Somewhat surprising, however, is the finding that excess mortality of males is not apparent for toddlers and older children under age five. Only about half of the countries have higher male toddler rates and only about one-third have higher male child mortality. For all countries together male mortality is only 1 per cent above that of females for toddlers and is 3 per cent below for children between two and five years of age.

Table 5 Under-five and infant mortality for five-year periods before the survey (children with mothers aged 20–29 years at birth)

Country	Date of survey	Levels of mortality for years before the survey							
		Mortality under age five ($_5q_0$)				Infant mortality ($_1q_0$)			
		0–4	5–9	10–14	15–19	0–4	5–9	10–14	15–19
Senegal	1978	250.6	269.7	293.7	267.9	102.0	115.7	115.2	105.7
Yemen AR	1979	234.8	268.8	(321.9)	(367.1)	162.8	154.2	186.4	(236.8)
Nepal	1976	232.7	241.1	294.0	293.1	142.1	149.3	181.5	171.6
Bangladesh	1975–6	208.9	187.4	205.1	230.0	117.0	109.8	129.7	139.5
Pakistan	1975	203.4	187.9	219.2	251.8	132.2	127.8	129.7	156.0
Benin	1981–2	196.1	240.3	254.1	(277.1)	101.8	126.2	139.4	156.0
Mauritania	1981–2	188.5	166.3	163.3	(227.6)	82.0	68.8	68.4	111.9
Cameroon	1978	181.3	191.9	238.0	258.1	95.0	96.2	137.2	149.5
Haiti	1977	186.6	234.0	254.7	(244.3)	124.3	148.7	157.0	143.0
Egypt	1980	182.1	230.7	240.9	265.7	124.3	142.6	135.3	139.4
Lesotho	1977	165.8	176.9	188.0	169.3	121.9	123.1	138.9	115.3
Turkey	1978	150.6	176.0	206.4	267.1	119.0	127.8	146.2	176.2
Nigeria	1981–2	152.4	135.8	184.1	204.1	79.9	67.0	99.7	108.8
Ivory Coast	1980–1	159.0	222.5	245.6	289.4	101.3	133.3	154.2	169.8
Indonesia	1976	151.6	162.6	199.0	217.7	87.7	88.6	112.5	117.2
Peru	1977–8	140.7	157.5	192.9	210.9	89.4	101.8	112.4	121.9
Morocco	1980	134.3	153.7	172.9	188.1	84.4	91.6	98.5	102.5
Sudan (N)	1978–9	129.4	123.0	140.4	(142.2)	66.6	72.2	71.3	49.1
Kenya	1977–8	134.8	148.1	156.5	193.0	83.2	88.2	96.1	121.0
Dom. Rep.	1975	120.7	135.7	162.0	(117.9)	80.9	97.7	105.2	72.3
Ghana	1979	116.7	124.1	157.8	147.3	64.8	67.7	85.9	78.3
Ecuador	1979–80	109.2	122.9	153.3	169.1	69.2	72.0	95.1	107.4
Colombia	1976	89.7	101.2	116.9	134.2	56.6	64.2	72.4	83.9
Tunisia	1978	101.6	126.0	138.3	186.1	74.4	74.1	78.4	105.6
Mexico	1976–7	84.4	108.8	118.6	139.1	60.2	74.8	80.5	86.3
Philippines	1978	85.4	86.3	86.3	90.9	52.3	53.6	49.6	54.6
Thailand	1975	82.9	107.5	121.6	137.5	56.8	76.5	86.4	95.4
Syria	1978	84.3	89.2	120.7	137.7	62.5	65.8	80.2	85.5
Sri Lanka	1975	81.0	81.4	87.6	102.0	57.9	56.7	58.7	60.7
Paraguay	1979	73.1	62.8	78.2	64.0	52.4	45.0	56.8	42.8
Jordan	1976	75.8	85.2	120.6	185.7	65.6	61.9	75.5	110.9
Guyana	1975	72.5	62.9	71.7	88.7	54.0	50.4	56.4	67.0
Venezuela	1977	55.0	63.3	57.7	(78.4)	45.4	45.1	41.2	44.5
Costa Rica	1976	50.5	76.2	100.1	90.0	44.2	59.0	81.2	60.1
Fiji	1974	51.5	55.9	61.0	69.8	41.5	48.0	49.6	59.3
Korea, Rep. of	1974	51.1	81.3	100.9	113.9	35.2	51.2	53.0	64.0
Jamaica	1975–6	48.4	42.7	54.3	100.2	38.8	30.0	39.7	78.7
Trin. and Tob.	1977	40.9	49.9	46.4	60.1	33.3	40.7	38.7	53.6
Malaysia	1974–5	46.7	51.6	70.6	105.0	35.5	38.5	50.8	72.2
Panama	1975–6	36.1	56.0	61.6	82.7	26.5	43.1	38.7	60.3
Portugal	1979–80	36.0	46.4	52.1	83.3	32.1	41.1	43.3	64.2

NOTES:
1 Countries are ordered by level of under-five mortality.
2 Under five: Mortality between birth and fifth birthday ($_5q_0$).
Infant: Mortality between birth and first birthday ($_1q_0$).

Table 6 Component rates of infant and child mortality for five-year periods before the survey (only children whose mothers were 20–29 years old at birth)

Country	Date of survey	Neo-natal mortality rate				Post-neonatal mortality rate				Toddler mortality rate ($_1q_1$)				Child mortality rate ($_3q_2$)			
		0–4	5–9	10–14	15–19	0–4	5–9	10–14	15–19	0–4	5–9	10–14	15–19	0–4	5–9	10–14	15–19
Senegal	1978	41.4	41.5	53.2	51.7	60.6	74.2	62.0	54.0	67.0	72.3	82.3	68.0	105.6	109.8	130.1	121.6
Yemen AR	1979	54.3	54.7	69.5	65.2	108.5	99.6	116.9	(171.6)	47.7	70.1	92.9	(75.0)	40.2	70.3	(81.2)	(103.5)
Nepal	1976	74.4	76.8	85.8	82.6	67.8	72.5	95.7	89.0	49.8	50.0	61.2	57.0	58.6	60.8	81.1	95.1
Bangladesh	1975–6	62.8	55.7	74.9	85.8	54.2	54.2	54.8	53.8	33.9	27.4	25.4	37.8	72.6	61.4	62.9	69.9
Pakistan	1975	76.9	70.3	62.4	86.3	55.3	57.5	67.2	69.6	33.9	32.3	56.7	61.2	49.8	37.8	49.0	55.8
Benin	1981–2	44.4	60.7	73.9	79.9	57.3	65.5	65.5	76.2	36.0	46.5	40.1	47.4	71.7	88.1	97.1	(108.8)
Mauritania	1981–2	42.2	37.6	33.5	61.2	39.9	31.3	34.9	50.7	48.5	42.5	37.6	51.3	70.9	64.9	66.8	(83.3)
Cameroon	1978	40.8	43.5	62.6	63.7	56.0	53.3	75.6	80.6	37.1	37.4	41.7	43.8	59.3	70.0	82.4	85.1
Haiti	1977	53.9	77.3	102.4	80.2	70.4	71.4	54.7	62.8	29.4	35.4	33.3	37.1	42.9	67.1	85.5	(84.3)
Egypt	1980	55.5	67.3	58.8	55.7	68.8	75.3	76.5	83.7	36.8	58.7	62.6	74.4	30.3	46.8	63.5	(78.1)
Lesotho	1977	65.7	71.9	71.7	60.8	56.2	51.2	67.2	54.5	26.4	33.1	32.2	27.7	24.2	29.2	25.7	(34.3)
Turkey	1978	59.2	47.6	55.7	69.2	59.9	80.3	90.5	107.1	19.4	29.2	36.4	64.8	16.8	26.7	35.4	(48.7)
Nigeria	1981–2	38.6	33.8	46.0	58.4	41.3	33.1	53.6	50.5	37.2	29.2	40.4	37.3	43.2	45.9	55.7	72.3
Ivory Coast	1980–1	46.9	65.4	73.8	75.2	54.4	67.9	80.4	94.5	30.4	43.0	47.1	52.3	34.9	62.6	64.0	96.8
Indonesia	1976	44.7	42.3	52.4	48.3	43.0	46.4	70.1	68.9	24.5	34.3	42.6	51.9	46.8	48.5	57.2	65.3
Peru	1977–8	36.5	46.4	41.6	48.1	52.9	55.5	70.7	73.9	32.2	34.8	52.6	51.7	25.0	28.2	40.2	52.2
Morocco	1980	44.0	51.3	53.8	52.3	40.3	40.3	44.7	50.2	31.1	39.4	47.1	55.7	24.2	30.2	37.2	42.0
Sudan (N)	1977	33.8	39.6	44.5	26.5	32.8	32.5	26.7	22.6	34.4	21.3	32.9	42.5	34.0	34.3	43.0	(57.8)
Kenya	1977–8	38.6	43.8	40.8	55.6	44.6	44.3	55.3	65.4	28.2	35.3	30.9	31.8	29.0	31.5	37.1	51.7
Dom. Rep.	1975	—	—	—	—	—	—	—	—	28.3	26.0	34.5	24.6	15.4	16.5	30.0	(25.2)
Ghana	1978	30.6	34.7	42.0	42.1	34.2	32.9	43.9	36.2	25.0	23.1	33.4	26.7	31.7	36.0	45.1	48.3
Ecuador	1979–80	34.0	32.8	44.2	43.0	35.2	39.2	50.9	62.2	24.6	32.7	36.2	39.2	18.9	22.7	29.2	31.2
Colombia	1976	25.9	31.8	34.8	39.3	30.7	32.4	37.6	44.5	16.2	17.6	24.0	31.5	19.2	22.4	24.6	24.2
Tunisia	1978	34.5	34.6	31.3	39.7	39.9	39.5	47.0	65.9	16.8	32.3	38.5	51.7	13.6	28.7	31.3	42.0
Mexico	1976–7	34.3	46.3	42.0	48.1	25.9	28.5	38.5	38.2	11.9	20.2	21.2	25.4	14.1	16.8	20.7	33.2
Philippines	1978	19.2	21.1	22.7	19.1	33.0	32.5	26.8	35.4	14.6	13.4	17.5	19.5	20.7	21.5	21.5	19.3
Thailand	1975	37.2	49.5	49.0	50.8	19.6	27.0	37.4	44.6	9.2	9.8	11.9	16.8	18.6	24.0	27.0	30.2
Syria	1978	16.8	16.6	16.8	16.8	45.6	49.2	63.4	68.7	14.4	8.2	21.1	23.1	9.1	16.9	23.4	34.7
Sri Lanka	1975	32.5	32.6	38.6	37.6	25.4	24.1	20.1	23.1	6.9	10.9	11.6	13.5	17.8	15.4	19.4	30.9
Paraguay	1979	—	—	—	—	—	—	—	—	14.6	9.7	12.4	8.4	7.4	9.0	10.5	13.8
Jordan	1976	21.7	29.7	31.5	44.0	43.8	32.2	44.0	66.8	6.6	16.8	32.0	44.6	4.4	8.2	17.3	41.3
Guyana	1975	29.7	29.9	31.6	35.9	24.3	20.5	24.8	31.1	11.2	4.3	11.9	18.2	8.4	8.9	4.4	5.1
Venezuela	1977	—	—	—	—	—	—	—	—	3.9	8.8	10.3	14.2	6.1	10.4	7.0	(21.5)
Costa Rica	1976	25.0	30.2	39.2	24.7	19.2	28.7	42.0	35.4	1.7	11.1	11.1	13.4	4.9	7.3	9.5	18.7
Fiji	1974	—	—	—	—	—	—	—	—	4.3	3.7	4.9	5.7	6.3	4.6	7.1	5.6
Korea, Rep. of	1974	19.9	30.0	25.3	24.4	15.3	21.2	27.7	39.6	6.4	12.8	21.9	19.6	10.0	19.2	29.3	34.4
Jamaica	1975–6	23.0	18.7	22.1	38.7	15.9	11.3	17.6	40.0	6.3	9.0	6.5	17.4	3.6	4.1	8.7	6.0
Trin. and Tob.	1977	23.5	31.9	25.9	33.5	9.9	8.9	12.8	20.1	1.9	6.6	2.8	3.5	5.9	3.0	5.2	3.4
Malaysia	1974–5	16.0	12.1	17.0	19.8	19.5	26.4	33.8	52.3	5.0	6.4	8.0	11.8	6.7	7.3	13.0	23.9
Panama	1975–6	17.0	24.2	24.6	35.3	9.5	18.9	14.1	25.0	4.1	7.4	15.2	14.8	5.7	6.1	8.8	9.3
Portugal	1979–80	19.4	18.4	23.2	32.0	12.7	23.1	20.1	32.2	2.0	3.6	5.6	10.6	2.0	1.6	3.7	9.9

NOTES:

1 Countries are ordered by level of under-five mortality.

2 — means rate is not calculable.

3 Neo-natal mortality: Mortality in first month of life.
Post-neonatal mortality: Mortality between ages one and eleven months.
Toddler mortality: Mortality at age one year ($_1q_1$).
Child mortality: Mortality between second and fifth birthdays ($_3q_2$).

Table 7 Change in under-five and infant mortality from previous period (children with mothers aged 20–29 years at birth)

Country	Date of survey	Change since previous period					
		Under age five ($_5q_0$)			Infant mortality ($_1q_1$)		
		0–4	5–9	10–14	0–4	5–9	10–14
Senegal	1978	−19.1	−24.0	25.8	−13.7	0.5	9.5
Yemen AR	1979	−34.0	(−53.1)	(−45.2)	8.6	−32.2	(−50.4)
Nepal	1976	−8.4	−52.9	0.9	−7.2	−32.2	9.9
Bangladesh	1975–6	21.5	−17.7	−24.9	7.2	−19.9	−9.8
Pakistan	1975	15.5	−31.3	−32.6	4.4	−1.9	−26.3
Benin	1981–2	−44.2	−13.8	(−23.0)	−24.4	−13.2	−16.6
Mauritania	1981–2	22.2	3.0	(−64.3)	13.2	0.4	−43.5
Cameroon	1978	−10.6	−46.1	−20.1	−1.2	−41.0	−12.3
Haiti	1977	−47.4	−20.7	(10.4)	−24.4	−8.3	14.0
Egypt	1980	−48.6	−10.2	−24.8	−18.3	7.3	−4.1
Lesotho	1977	−11.1	−11.1	18.7	−1.2	−15.8	23.6
Turkey	1978	−25.4	−30.4	−60.7	−8.8	−18.4	−30.0
Nigeria	1981–2	16.6	−48.3	−20.0	12.9	−32.7	−9.1
Ivory Coast	1980–1	−63.5	−23.1	−43.8	−32.0	−20.9	−15.6
Indonesia	1976	−11.0	−36.4	−18.7	−0.9	−23.9	−4.7
Sudan (N)	1978–9	6.4	−17.4	(−1.8)	−5.6	0.9	22.2
Peru	1977–8	−16.8	−35.4	−18.0	−12.4	−10.6	−9.5
Morocco	1980	−19.4	−19.2	−15.2	−7.2	−6.9	−4.0
Kenya	1977–8	−13.3	−8.4	−36.5	−5.0	−7.9	−24.9
Dom. Rep.	1975	−15.0	−26.3	(44.1)	−16.8	−7.5	32.9
Ghana	1979	−7.4	−33.7	10.5	−2.9	−18.2	7.6
Ecuador	1979–80	−13.7	−30.4	−15.8	−2.8	−23.1	−12.3
Colombia	1976	−11.5	−15.7	−17.3	−7.6	−8.2	−11.5
Tunisia	1978	−24.4	−12.3	−47.8	0.3	−4.3	−27.2
Mexico	1976–7	−24.4	−9.8	−20.5	−14.6	−5.7	−5.8
Philippines	1978	−0.9	0.0	−4.6	−1.3	4.0	−5.0
Thailand	1975	−24.6	−14.1	−15.9	−19.7	−9.9	−9.0
Syria	1978	−4.9	−31.5	−17.0	−3.3	−14.4	−5.3
Sri Lanka	1975	−0.4	−6.2	−14.4	1.2	−2.0	−2.0
Paraguay	1979	10.3	−15.4	14.2	7.4	−11.8	14.0
Jordan	1976	−9.4	−35.4	−65.1	3.7	−13.6	−35.4
Guyana	1975	9.6	−8.8	−17.0	3.6	−6.0	−10.6
Venezuela	1977	−8.3	5.6	(−20.7)	0.3	3.9	−3.3
Costa Rica	1976	−25.7	−23.9	10.1	−14.8	−22.2	21.1
Fiji	1974	−4.4	−5.1	−8.8	−6.5	−1.6	−9.7
Korea, Rep. of	1974	−30.2	−19.6	−13.0	−16.0	−1.8	−11.0
Jamaica	1975–6	5.7	−11.6	−45.9	8.8	−9.7	−39.0
Trin. and Tob.	1977	−9.0	3.5	−13.7	−7.4	2.0	−14.9
Malaysia	1974–5	−4.9	−19.0	−34.4	−3.0	−12.3	−21.4
Panama	1975–6	−19.9	−5.6	−21.1	−16.6	4.4	−21.6
Portugal	1979–80	−10.4	−5.7	−31.2	−9.0	−2.2	−20.9

NOTE: Brackets indicate that a subinterval used contained less than 500 children exposed.

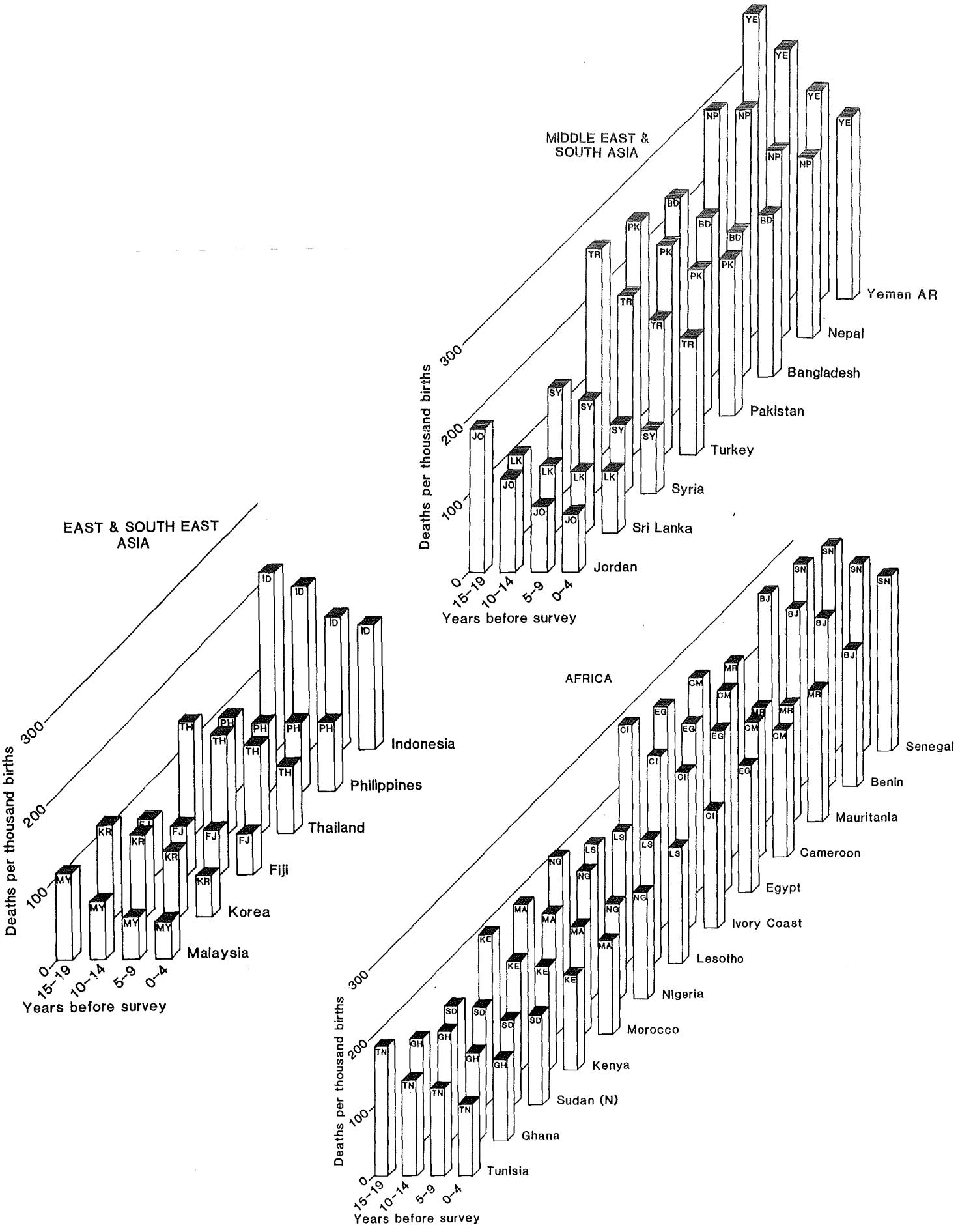

Figure 5 Change in under-five mortality over time (children born to women aged 20–29 at the time of the birth)

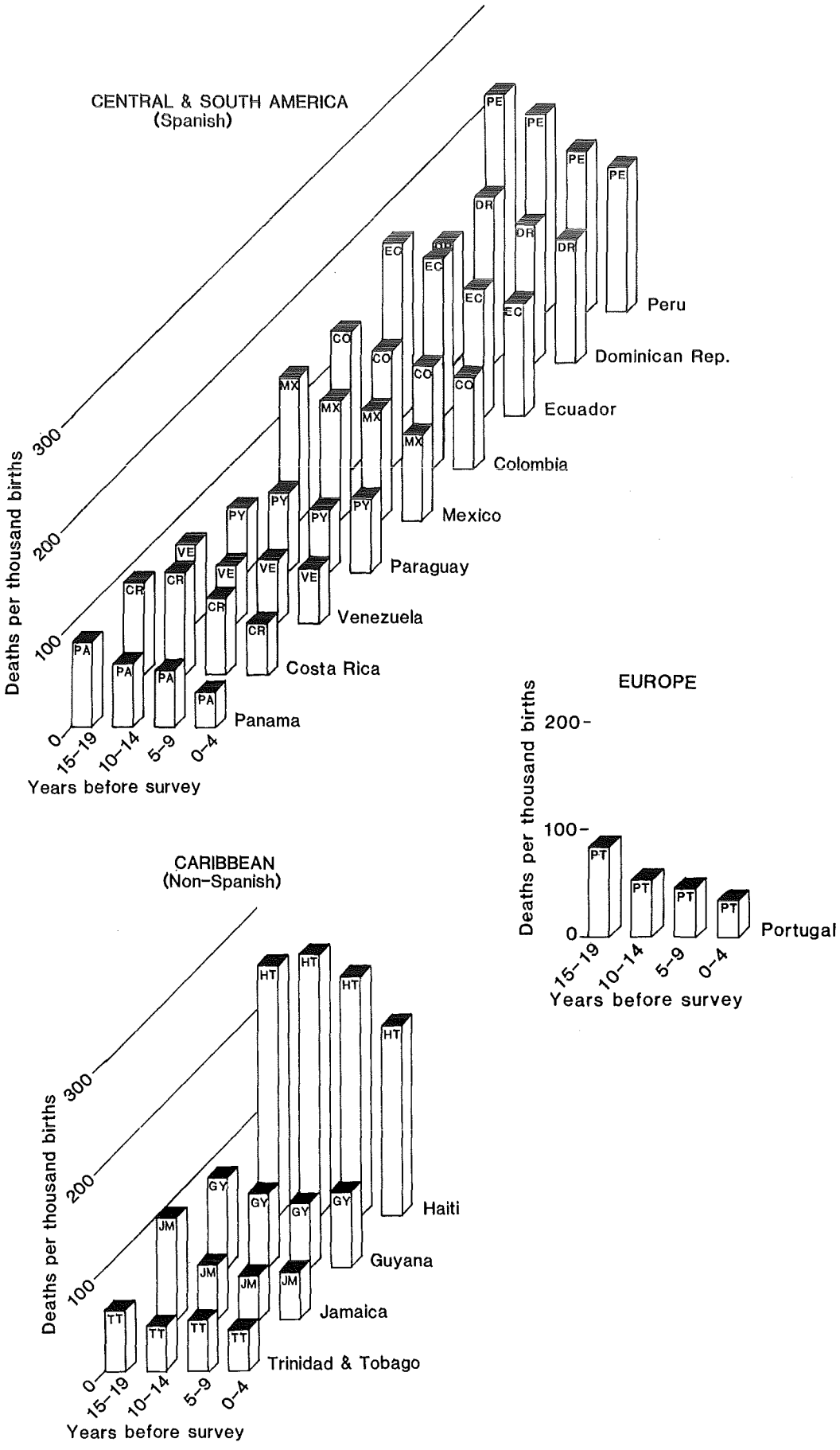

Figure 5 (*cont*)

Table 8 Relative change in infant and child mortality over time (children with mothers aged 20–29 years at birth)

Country	Date of survey	Relative levels of mortality for years before survey (0–4 = 100)											
		Infant mortality ($_1q_0$)				Toddler mortality ($_1q_1$)				Child mortality ($_3q_2$)			
		0–4	5–9	10–14	15–19	0–4	5–9	10–14	15–19	0–4	5–9	10–14	15–19
Senegal	1978	100	115	108	99	100	110	113	93	100	108	125	118
Yemen AR	1979	100	95	114	(145)	100	147	195	(157)	100	175	(202)	(256)
Nepal	1976	100	108	126	127	100	93	114	113	100	101	134	160
Bangladesh	1975–6	100	92	109	117	100	67	60	100	100	77	84	96
Pakistan	1975	100	99	104	119	100	94	155	175	100	83	104	120
Benin	1981–2	100	124	137	153	100	129	111	132	100	123	135	(152)
Mauritania	1981–2	100	84	83	136	100	88	78	106	100	92	94	(117)
Cameroon	1978	100	101	144	157	100	101	112	118	100	118	139	144
Haiti	1977	100	123	129	123	100	103	123	122	100	117	156	(173)
Egypt	1980	100	115	109	112	100	160	170	202	100	154	210	258
Lesotho	1977	100	103	110	92	100	104	107	89	100	104	106	125
Turkey	1978	100	104	119	141	100	147	171	295	100	146	201	285
Nigeria	1981–2	100	84	125	136	100	78	109	100	100	106	129	167
Ivory Coast	1980–1	100	132	152	168	100	141	155	172	100	179	183	277
Indonesia	1976	100	101	131	132	100	132	162	198	100	105	124	147
Sudan	1978–9	100	95	101	68	100	62	96	119	100	98	107	(150)
Peru	1977–8	100	114	121	132	100	117	158	170	100	118	150	189
Morocco	1980	100	109	117	121	100	127	151	179	100	125	154	174
Kenya	1977–8	100	110	116	146	100	129	124	123	100	117	121	156
Dom. Rep.	1975	100	115	123	84	100	102	130	99	100	106	139	(134)
Ghana	1979	100	104	133	121	100	92	134	107	100	114	142	152
Ecuador	1979–80	100	104	137	155	100	133	147	159	100	120	154	165
Colombia	1976	100	104	120	142	100	97	145	202	100	93	106	104
Tunisia	1978	100	100	105	142	100	192	229	308	100	211	230	309
Mexico	1976–7	100	114	120	125	100	156	177	204	100	123	149	245
Philippines	1978	100	99	98	99	100	92	127	130	100	88	103	92
Thailand	1975	100	134	151	160	100	101	154	202	100	138	153	160
Syria	1978	100	105	124	132	100	72	153	163	100	147	232	335
Sri Lanka	1975	100	96	99	110	100	124	120	151	100	77	95	153
Paraguay	1979	100	90	98	72	100	64	61	46	100	110	86	129
Jordan	1976	100	102	121	174	100	191	344	487	100	165	322	818
Guyana	1975	100	96	108	128	100	57	114	166	100	84	60	47
Venezuela	1977	100	89	82	89	100	137	212	257	100	166	117	(348)
Costa Rica	1976	100	139	158	113	100	366	400	431	100	153	173	324
Fiji	1974	100	112	114	137	100	86	106	140	100	60	99	75
Korea, Rep. of	1974	100	139	147	161	100	194	272	281	100	196	347	406
Jamaica	1975–6	100	88	97	170	100	109	102	236	100	107	160	205
Trin. and Tob.	1977	100	106	95	132	100	185	104	103	100	40	111	61
Malaysia	1974–5	100	109	153	207	100	127	131	196	100	86	147	274
Panama	1975–6	100	152	135	178	100	147	266	271	100	91	136	127
Portugal	1979–80	100	128	135	200	100	180	280	530	100	80	185	495

Table 9 Average declines in mortality between the period 15–19 and 0–4 years before the survey (declines expressed as deaths per thousand)

Mortality level	Neo-natal[a]	Post-neonatal[a]	Toddler ($_1q_1$)	Child ($_3q_2$)	Under 5 ($_5q_0$)
Extremely high	16.2	18.4	13.0	26.0	60.1
Very high	16.2	17.2	15.4	32.6	69.9
High	7.5	11.6	11.6	19.5	41.3
Moderate to high	7.5	15.9	11.1	13.3	41.0
Moderate	13.3	19.2	10.9	10.5	44.9
All	11.3	16.7	12.3	19.2	50.5

[a] Not including the Dominican Republic, Fiji, Paraguay and Venezuela.

There appears to be a geographical relationship with differential mortality by sex. As averages for areas of the ratio (expressed per 100) of male to female mortality rates, we have:

	Infant ($_1q_0$)	Toddler ($_1q_1$)	Child ($_3q_2$)
Africa	114	122	97
Northern	111	96	99
Sub-Saharan	115	112	103
Asia and Pacific	112	94	92
West	100	84	87
South	112	74	84
East and Pacific	120	115	100
Americas	121	98	100
South	115	100	104
North and Central	123	95	80
Caribbean	127	98	115
All	116	101	97

Age of the mother at the child's birth

Infant, toddler and child mortality rates by age of mother at birth are shown in table 11. As is well known from the statistics of the developed countries, there is a U-shaped relationship between infant mortality and age at birth. We examine the relationship in the WFS data by calculating infant, toddler and child mortality rates according to four groups of age of mother at birth: less than 20 years, 20–29, 30–39 and 40 or more.

In order to obtain a clearer picture of the nature of the relationship, we have also calculated indexes comparing the level of mortality for a given age group relative to that of the 20–29 age group (=100), which are shown in table 12. Overall the U-shaped relationship is strongly evident for infant mortality but is less strong for toddler and child mortality. Although there is a wide variation between countries, the increase in mortality at older ages appears to be more pronounced at lower levels of mortality. Figure 7 shows the average index values for countries grouped by their level of under-five mortality.

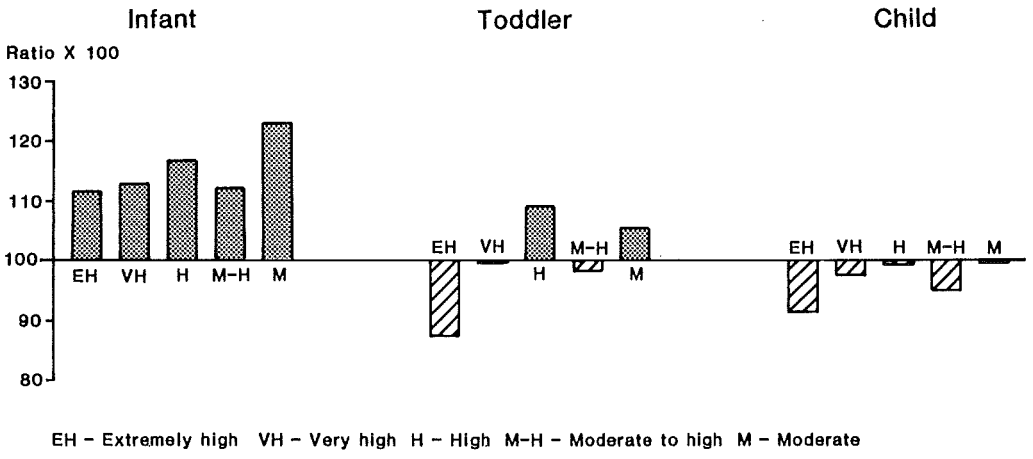

Figure 6 Average ratio of male to female mortality for mortality level groups

Table 10 Male and female mortality rates (0–9 years before survey)

Country	Infant ($_1q_0$)		Toddler ($_1q_1$)		Child ($_3q_2$)	
	Male	Female	Male	Female	Male	Female
Senegal	124.9	108.0	76.5	77.3	107.0	106.8
Yemen AR	173.1	154.7	47.6	53.5	56.1	60.6
Nepal	151.6	147.9	49.2	55.0	57.7	60.7
Bangladesh	143.7	121.5	26.0	35.4	57.7	68.6
Pakistan	140.7	134.6	26.1	40.4	36.9	54.4
Benin	129.7	110.1	42.9	39.7	83.4	77.8
Mauritania	95.2	78.1	40.6	44.3	69.3	75.9
Cameroon	107.7	101.1	41.5	39.8	61.5	62.0
Haiti	145.4	120.7	30.6	27.6	47.8	61.2
Egypt	139.4	137.4	40.1	56.5	38.5	40.9
Lesotho	132.6	125.4	35.3	24.4	29.3	26.6
Turkey	143.0	130.5	21.2	34.2	18.4	19.5
Nigeria	96.8	81.7	33.5	36.8	45.9	45.2
Ivory Coast	142.2	114.3	36.8	30.9	49.8	44.8
Indonesia	109.0	83.6	32.3	28.2	52.6	40.1
Peru	104.8	99.7	33.4	33.4	28.8	30.8
Morocco	99.0	93.2	29.5	33.4	31.4	28.4
Sudan (N)	87.9	71.6	35.3	28.2	36.3	47.7
Kenya	96.5	87.7	32.9	28.2	36.4	35.7
Dom. Rep.	103.1	82.3	25.2	24.5	17.2	20.2
Ghana	81.1	66.4	26.1	22.6	35.9	37.6
Ecuador	87.8	72.4	29.5	28.5	19.9	23.0
Colombia	73.6	61.9	15.5	20.8	20.5	24.8
Tunisia	78.4	77.0	24.0	22.9	22.7	18.2
Mexico	82.9	66.4	14.8	17.2	14.7	16.7
Philippines	62.5	52.5	14.2	15.2	19.1	21.9
Thailand	76.9	71.4	10.4	7.3	17.3	26.8
Syria	63.9	69.5	11.9	11.3	9.3	14.6
Sri Lanka	65.6	52.9	7.6	11.2	16.3	18.7
Paraguay	58.1	56.4	13.4	12.5	13.3	7.9
Jordan	61.9	72.9	11.4	14.0	7.0	7.1
Guyana	65.5	50.3	10.0	9.6	8.9	8.4
Venezuela	55.8	43.9	6.7	5.9	7.6	8.4
Costa Rica	72.4	54.7	7.9	7.8	4.8	8.1
Fiji	53.4	44.8	4.4	4.8	5.3	5.1
Korea, Rep. of	49.9	44.4	10.0	9.4	11.8	12.7
Jamaica	47.5	34.8	9.3	8.7	6.2	5.3
Trin. and Tob.	46.6	38.7	3.5	4.9	4.5	2.8
Malaysia	44.3	33.7	6.9	4.9	9.2	7.7
Panama	43.6	39.9	6.2	6.8	7.6	8.7
Portugal	46.8	31.5	3.8	2.5	1.7	2.9

Table 11 Infant, toddler and child mortality by age of mother at birth (0–9 years before survey)

Country	Infant ($_1q_0$)				Toddler ($_1q_1$)				Child ($_3q_2$)			
	<20	20–29	30–39	40+	<20	20–29	30–39	40+	<20	20–29	30–39	40+
Senegal	139.6	108.2	114.4	(114.2)	85.1	69.4	85.1	(68.4)	108.2	107.5	102.6	(132.2)
Yemen AR	204.4	159.2	143.3	(164.1)	35.0	57.0	50.9	(40.8)	40.8	75.1	51.7	(51.8)
Nepal	198.7	145.3	129.0	(155.3)	56.3	49.9	56.4	(23.4)	61.6	59.6	57.4	(50.3)
Bangladesh	174.3	113.5	113.0	(124.0)	29.8	30.9	28.8	(62.5)	60.2	67.6	59.6	(39.7)
Pakistan	195.4	130.1	117.1	(136.0)	33.4	33.2	32.4	(34.1)	49.3	44.5	42.7	(70.9)
Benin	133.2	112.2	126.4	(146.0)	48.2	40.4	38.7	(40.3)	88.9	78.3	80.5	(71.0)
Mauritania	99.2	75.8	89.1	(149.1)	37.2	45.8	35.8	(72.4)	67.0	68.5	86.5	(97.5)
Cameroon	115.5	96.0	103.0	150.8	53.5	39.4	33.0	40.0	53.6	61.7	68.5	(62.5)
Haiti	(175.0)	134.6	121.6	(107.9)	(34.0)	32.1	22.7	(30.2)	(79.1)	53.5	51.2	(23.9)
Egypt	176.7	132.6	122.9	(174.6)	58.0	46.7	46.2	(21.2)	37.4	38.0	45.0	(39.6)
Lesotho	123.3	122.4	144.2	(126.4)	33.1	29.4	29.4	(26.0)	33.8	26.4	29.4	(9.3)
Turkey	175.4	123.4	130.8	(180.8)	35.6	24.1	31.2	(0.0)	13.8	21.5	17.9	(12.0)
Nigeria	110.6	73.9	101.4	(127.4)	36.8	33.7	34.8	(51.2)	43.6	44.3	44.2	(135.2)
Ivory Coast	159.1	115.2	125.8	(115.1)	38.6	35.8	27.2	(21.4)	53.8	46.7	39.1	(73.3)
Indonesia	125.2	88.1	88.6	(119.8)	34.5	29.3	30.9	(14.1)	54.4	47.6	39.1	(37.2)
Peru	108.6	95.3	105.4	140.8	32.6	33.4	34.6	(25.4)	28.9	26.5	33.4	(54.6)
Morocco	122.7	87.7	95.0	(110.1)	34.0	35.1	25.7	(16.1)	37.6	27.1	31.4	(23.3)
Sudan (N)	114.3	69.6	74.6	(84.8)	41.9	28.7	28.1	(53.4)	42.4	36.6	54.2	(71.1)
Kenya	114.3	85.5	85.7	112.1	32.9	31.4	28.9	21.0	36.5	30.1	46.8	(40.1)
Dom. Rep.	98.2	89.0	93.8	(127.5)	23.7	27.2	20.4	(30.2)	22.2	16.0	22.9	(0.0)
Ghana	87.7	66.1	70.9	(120.2)	26.2	25.2	22.3	(20.1)	46.1	33.5	34.0	(66.0)
Ecuador	95.7	70.6	86.7	(105.6)	30.8	28.5	27.3	(43.6)	19.0	20.8	22.5	(44.2)
Colombia	80.0	60.4	73.5	(80.7)	22.9	16.9	13.7	(49.5)	23.4	20.7	25.4	(27.9)
Tunisia	99.6	74.3	73.3	(110.6)	16.4	24.4	24.0	(19.2)	14.1	18.4	24.7	(21.0)
Mexico	86.8	67.2	79.8	(96.6)	18.8	15.8	15.0	(14.9)	18.6	15.4	14.3	(22.2)
Philippines	55.5	52.9	62.4	79.7	17.9	14.0	13.5	27.7	19.0	21.0	20.4	(12.9)
Thailand	102.0	66.8	74.7	(87.2)	4.1	9.5	8.7	(15.5)	16.3	21.2	25.0	(20.6)
Syria	86.7	64.0	62.1	(57.6)	11.6	11.2	12.0	(14.2)	9.7	12.5	10.8	(25.1)
Sri Lanka	71.8	57.3	55.3	(96.2)	11.9	8.8	9.3	(11.5)	17.6	16.6	19.6	(8.2)
Paraguay	60.3	49.0	63.1	(101.6)	9.4	12.4	16.0	(9.8)	10.7	8.1	15.1	(5.8)
Jordan	83.4	63.8	63.7	(85.1)	14.6	11.4	14.4	(6.3)	9.3	6.2	6.9	(17.0)
Guyana	61.9	52.3	60.9	(141.4)	13.8	7.9	11.4	(8.0)	5.6	8.6	11.3	(0.0)
Venezuela	59.4	45.3	52.6	(70.6)	6.0	6.2	7.1	(0.0)	8.2	8.1	7.6	(0.0)
Costa Rica	66.0	52.0	79.9	(107.6)	9.2	6.7	8.9	(11.7)	2.5	6.1	9.3	(0.0)
Fiji	52.3	44.7	55.8	(81.2)	4.4	4.0	6.2	(5.8)	1.2	5.5	6.8	(6.8)
Korea, Rep. of	(80.1)	42.9	50.8	(77.0)	(10.5)	9.5	10.3	(9.1)	(18.7)	14.4	7.8	(5.2)
Jamaica	38.5	34.6	56.6	(45.0)	11.4	7.6	7.3	(31.1)	8.7	3.9	6.5	(9.6)
Trin. and Tob.	50.2	36.5	54.0	(20.6)	3.2	4.2	5.2	(0.0)	2.9	4.1	2.2	(20.0)
Malaysia	57.9	37.0	35.8	(41.4)	4.6	5.7	7.4	(0.0)	9.1	7.0	10.2	(19.7)
Panama	41.7	35.0	54.6	(86.6)	4.7	5.7	8.8	(18.5)	11.8	5.9	11.6	(0.0)
Portugal	(45.2)	36.9	39.9	(69.3)	(0.0)	2.8	2.8	(19.7)	(3.6)	1.8	3.0	(0.0)

Table 12 Relative levels of mortality by age of mother at birth (ratio of mortality rates to rates for mothers aged 20–29)

Country	Infant ($_1q_0$)				Toddler ($_1q_1$)				Child ($_3q_2$)			
	<20	20–29	30–39	40+	<20	20–29	30–39	40+	<20	20–29	30–39	40+
Senegal	129	100	106	(105)	123	100	123	(99)	101	100	95	(123)
Yemen AR	128	100	106	(106)	123	100	123	(99)	101	100	95	(123)
Nepal	137	100	89	(107)	113	100	113	(47)	103	100	96	(84)
Bangladesh	154	100	100	(109)	96	100	93	(202)	89	100	88	(59)
Pakistan	150	100	90	(105)	101	100	98	(103)	111	100	96	(159)
Benin	119	100	113	(130)	119	100	96	(100)	114	100	103	(91)
Mauritania	131	100	118	(197)	81	100	78	(158)	98	100	126	(142)
Cameroon	120	100	107	157	136	100	84	102	87	100	111	(101)
Haiti	(130)	100	90	(80)	(106)	100	71	(94)	(148)	100	96	(45)
Egypt	133	100	93	(132)	124	100	99	(45)	98	100	108	(104)
Lesotho	101	100	118	(103)	112	100	100	(88)	128	100	111	(35)
Turkey	142	100	106	(147)	148	100	129	(0)	64	100	83	(56)
Nigeria	150	100	137	(172)	109	100	103	(152)	98	100	100	(305)
Ivory Coast'	138	100	109	(100)	108	100	76	(60)	115	100	84	(157)
Indonesia	142	100	101	(136)	118	100	106	(48)	114	100	82	(78)
Peru	114	100	111	148	98	100	104	(76)	109	100	126	(206)
Morocco	140	100	108	(126)	97	100	73	(46)	139	100	116	(86)
Sudan (N)	164	100	107	(122)	146	100	98	(186)	116	100	148	(194)
Kenya	134	100	100	131	105	100	92	67	121	100	156	(133)
Dom. Rep.	110	100	105	(143)	87	100	75	(111)	139	100	144	(0)
Ghana	133	100	107	(182)	104	100	88	(80)	138	100	101	(197)
Ecuador	136	100	123	(150)	108	100	96	(153)	91	100	108	(213)
Colombia	133	100	122	(134)	136	100	81	(292)	113	100	122	(134)
Tunisia	134	100	99	(149)	67	100	98	(79)	77	100	134	(114)
Mexico	129	100	119	(144)	119	100	95	(94)	121	100	93	(144)
Philippines	105	100	118	151	127	100	96	198	90	100	97	(61)
Thailand	153	100	112	(131)	43	100	92	(163)	77	100	118	(97)
Syria	136	100	97	(90)	104	100	107	(127)	78	100	86	(201)
Sri Lanka	125	100	96	(168)	135	100	106	(130)	106	100	118	(49)
Paraguay	123	100	129	(207)	76	100	129	(79)	131	100	186	(71)
Jordan	131	100	100	(133)	129	100	126	(56)	151	100	112	(276)
Guyana	118	100	116	(271)	176	100	144	(102)	65	100	131	(0)
Venezuela	131	100	116	(156)	96	100	114	(0)	101	100	94	(0)
Costa Rica	127	100	154	(207)	137	100	132	(174)	41	100	151	(0)
Fiji	117	100	125	(182)	112	100	156	(145)	22	100	125	(124)
Korea, Rep. of	(187)	100	119	(180)	(111)	100	108	(96)	(129)	100	54	(36)
Jamaica	111	100	163	(130)	150	100	95	(408)	225	100	169	(250)
Trin. and Tob.	138	100	148	(57)	76	100	122	(0)	70	100	53	(488)
Malaysia	156	100	97	(112)	82	100	131	(0)	130	100	146	(282)
Panama	119	100	156	(247)	82	100	155	(325)	200	100	197	(0)
Portugal	(122)	100	108	(188)	(0)	100	100	(704)	(200)	100	167	(0)

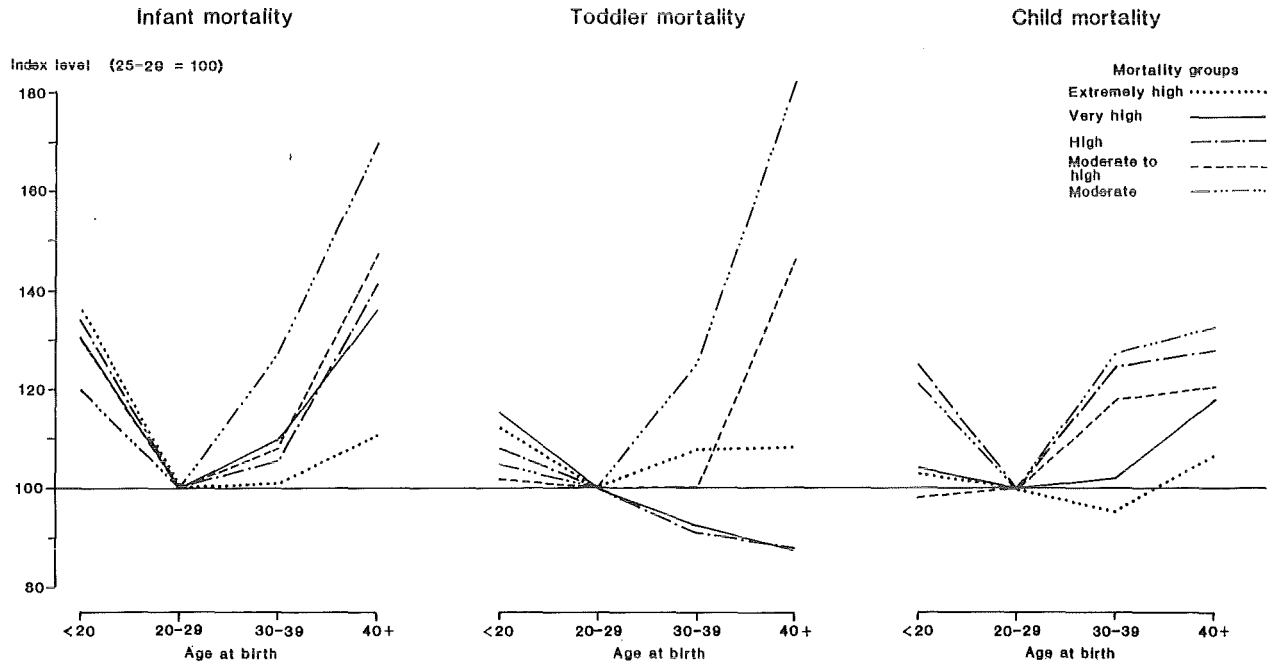

Figure 7 Relative levels (indexes) of infant, toddler and child mortality, according to age of mother at birth for mortality groups

Order of birth

There are many reasons to believe that the mortality of infants, toddlers and small children should be associated with their order of birth. On the one hand, first-born children are more likely to be born to a mother who is biologically, mentally, socially and economically unprepared to bear and bring up a child. On the other hand, children of high birth orders are more likely to be born to mothers who are physically more worn out and older, are more likely to be affected by competition from older siblings in terms of food and other family resources, are more likely to be cared for by someone other than the mother, especially an older sister, and are more likely to be considered superfluous. Moreover, since women of higher socio-economic status are likely to have smaller families than those of lower status, a disproportionately large share of children of high birth orders come from families of lower education and income. For these reasons, we expect mortality to have a U-shaped relationship with birth order.

Infant, toddler and child mortality rates according to birth order are shown in table 13. The rates have been calculated for four groups of children: first born, second or third, fourth to sixth, and seventh or higher. The relative levels of the rates for countries grouped by their level of under-five mortality are shown in table 14.

Overall, our expectations for a U-shaped curve hold only for infant mortality, and even here first-born children are only six per cent more likely to die in infancy than the second and third born (figure 8). Fourth to sixth order children are also only about 5 per cent more likely to die, but seventh or higher order children have excess mortality of almost 40 per cent.

The relationship between mortality and birth order is far from uniform. Only 25 of the 41 countries show higher first-order infant mortality, as compared to second and third born, and 27 show higher mortality for fourth to sixth order children. However, only Bangladesh, Haiti, Pakistan and Sudan have lower infant mortality for seventh or higher order children. We should note here that the relationship between birth order and mortality, especially infant mortality, can be distorted because of the omission of dead children, particularly those first born.

We now turn our attention to toddler and child mortality. For all countries together we see quite a similar pattern for both toddlers and other children, with mortality rising sharply with birth order. In addition, the number of countries at variance with this overall pattern becomes smaller as we move to higher orders, as well as from infant to toddler to child mortality. Always in comparison with rates for second and third order, we see that five countries – Bangladesh, Haiti, Jamaica, Senegal, and Sri Lanka – have toddler mortality over two deaths higher for first births and five countries – Ghana, Korea, Lesotho, Panama and Trinidad and Tobago – have higher child mortality. Six countries – Benin, Cameroon, Colombia, Haiti, Ivory Coast and Morocco – have toddler mortality lower by more than two deaths for the highest birth order group, and only two countries – Ivory Coast and Venezuela (ignoring rates in brackets) – have lower child mortality for the highest orders.

With level of mortality, there does appear to be an inverse relationship with the excess mortality of higher order children, particularly accentuated for the group of countries at moderate levels of mortality. Undoubtedly this relationship is partly due to the joint effects of low socio-economic status and unrestricted fertility.

Length of interbirth interval

It is generally accepted that short intervals between births are detrimental to the health of the mother and of the

children born at both ends of the interval. A short interval does not give the mother sufficient time to recuperate from the birth and to replenish her stores of nutrients used during pregnancy, especially in conditions of malnutrition. Moreover, having two very young children to care for at the same time does not allow the mother to devote her full attention to either. For example, breastfeeding may be shortened if the mother becomes pregnant again; indeed many societies proscribe sexual relations during breastfeeding in order to lengthen the birth interval.

The effect of longer than normal intervals is less well understood. On the other hand, the mother has more time to prepare for the next child, both biologically and in child care. On the other hand, long birth intervals may be the result of health problems, including spontaneous foetal loss, or due to a desire to terminate childbearing, so that a child born after a long interval may not be as welcome as other children.

Table 13 Infant, toddler and child mortality rates by order of birth (0–9 years before survey)

Country	Infant ($_1q_0$)				Toddler ($_1q_1$)				Child ($_3q_2$)			
	1	2–3	4–6	7+	1	2–3	4–6	7+	1	2–3	4–6	7+
Senegal	126.0	108.4	116.2	120.0	80.3	68.6	75.8	87.2	95.4	115.3	100.0	115.1
Yemen AR	185.9	152.0	148.5	189.1	40.8	44.9	60.7	52.6	62.0	61.0	57.0	(50.5)
Nepal	171.3	139.7	142.5	162.0	47.7	50.0	54.4	59.0	55.9	57.7	62.1	61.2
Bangladesh	173.1	138.7	109.4	126.6	28.7	25.5	32.8	36.6	54.6	58.5	72.2	60.9
Pakistan	170.2	140.2	125.3	129.3	23.3	32.6	34.9	37.9	33.2	45.1	51.6	45.0
Benin	106.7	103.7	126.6	162.3	34.4	37.9	53.5	32.2	82.4	83.4	75.9	82.9
Mauritania	98.3	77.9	69.8	122.9	32.7	40.5	45.4	51.3	54.8	71.0	74.3	95.9
Cameroon	122.1	92.6	94.1	125.3	42.1	43.7	37.9	38.3	56.3	54.3	66.2	77.6
Haiti	120.8	140.6	138.5	127.0	31.4	28.8	36.0	13.6	54.9	65.2	52.6	(33.9)
Egypt	135.1	127.8	137.1	162.2	39.5	48.7	49.5	53.1	20.5	39.8	48.0	44.6
Lesotho	112.5	117.6	135.0	178.8	28.9	31.2	27.9	32.5	36.5	25.4	30.4	(9.2)
Turkey	149.5	126.8	131.8	148.1	20.0	25.2	28.2	39.0	14.3	18.9	20.9	20.5
Nigeria	92.0	78.0	86.3	125.3	29.2	31.0	42.2	38.6	36.3	44.5	51.6	51.4
Ivory Coast	164.5	110.7	117.6	134.4	38.9	37.0	27.9	32.4	42.5	50.7	48.6	43.9
Indonesia	108.1	92.5	85.8	112.0	27.7	26.7	35.4	30.0	42.9	45.9	45.4	55.0
Peru	79.5	90.4	102.0	137.5	24.9	30.0	36.8	40.8	16.4	25.7	32.5	44.0
Morocco	102.7	89.4	81.3	116.2	23.1	36.3	33.3	29.0	24.7	30.7	28.7	34.0
Sudan	101.6	80.0	75.6	68.9	32.8	31.9	32.0	30.0	32.5	36.8	45.7	55.8
Kenya	102.7	85.7	82.7	150.5	32.4	31.0	29.9	29.5	28.6	32.0	35.7	48.0
Dom. Rep.	87.4	91.9	80.4	114.2	13.6	29.5	23.7	29.2	15.0	24.2	10.7	25.0
Ghana	78.1	60.9	76.7	90.5	19.7	24.7	27.6	23.5	43.7	31.1	35.6	42.8
Ecuador	62.0	75.8	78.6	105.9	15.8	29.2	36.7	30.9	15.3	20.9	23.3	25.7
Colombia	59.1	66.6	60.1	87.1	10.4	22.5	19.1	17.6	16.0	21.6	24.1	27.8
Tunisia	74.9	69.7	61.2	117.3	17.9	18.6	29.2	25.2	12.3	18.2	20.0	31.2
Mexico	69.6	64.7	77.0	88.0	10.2	15.4	18.1	18.2	11.6	12.7	20.1	16.8
Philippines	44.8	52.8	53.6	80.4	8.5	14.8	14.7	19.8	10.8	19.5	23.6	25.4
Thailand	70.8	65.1	68.9	102.9	2.6	9.4	9.1	14.7	13.1	18.9	28.5	26.0
Syria	82.2	59.5	59.2	74.2	6.2	12.8	11.6	13.8	9.2	11.5	12.8	13.0
Sri Lanka	51.6	57.1	59.3	72.7	9.3	6.8	10.6	12.2	8.5	17.6	17.1	28.5
Paraguay	50.8	50.2	53.0	79.8	6.4	15.5	13.5	15.4	8.5	10.4	9.0	15.4
Jordan	60.9	70.9	58.9	76.1	11.5	11.6	11.2	15.7	4.1	6.0	9.8	6.3
Guyana	50.5	52.9	59.4	72.2	8.0	8.3	9.4	14.3	5.2	8.3	9.0	11.5
Venezuela	36.0	45.0	59.3	65.0	5.1	5.3	5.9	11.2	6.5	7.4	10.9	6.4
Costa Rica	38.3	55.3	62.5	101.8	3.5	5.5	8.7	14.0	2.1	4.2	8.4	10.6
Fiji	51.3	42.3	49.9	60.2	2.9	4.4	4.9	6.6	2.1	5.1	7.2	5.4
Korea, Rep. of	44.2	41.5	49.5	75.4	7.3	7.9	11.6	17.6	15.1	10.9	12.0	11.9
Jamaica	30.6	36.2	40.6	63.0	10.3	7.4	6.9	13.6	6.6	5.2	5.2	6.9
Trin. and Tob.	36.3	34.8	38.4	76.9	3.2	4.0	3.5	7.3	4.3	1.6	4.4	5.6
Malaysia	41.2	35.7	36.0	47.4	2.4	4.3	9.1	6.7	4.5	8.7	9.4	10.2
Panama	29.8	32.9	45.5	67.3	2.7	5.6	10.2	6.5	8.4	5.7	8.6	12.0
Portugal	29.7	38.4	53.9	(70.9)	1.6	1.7	8.2	(9.3)	1.9	1.7	4.2	(3.2)

Table 14 Averages[a] of relative levels of mortality rates, according to birth order, for countries grouped by mortality level (orders two and three = 100)

Mortality level	Infant ($_1q_0$)				Toddler ($_1q_1$)				Child ($_3q_2$)			
	1	2–3	4–6	7+	1	2–3	4–6	7+	1	2–3	4–6	7+
Exremely high	118	100	100	115	96	100	122	118	91	100	103	99
Very high	116	100	104	133	92	100	105	105	88	100	109	99
High	113	100	100	126	84	100	105	102	88	100	102	135
Moderate to high	101	100	102	144	64	100	113	124	71	100	118	138
Moderate	94	100	116	165	85	100	163	212	105	100	159	163
All	107	100	106	140	83	100	125	139	89	100	122	131

[a] Unweighted averages of relative levels of the countries within the group.

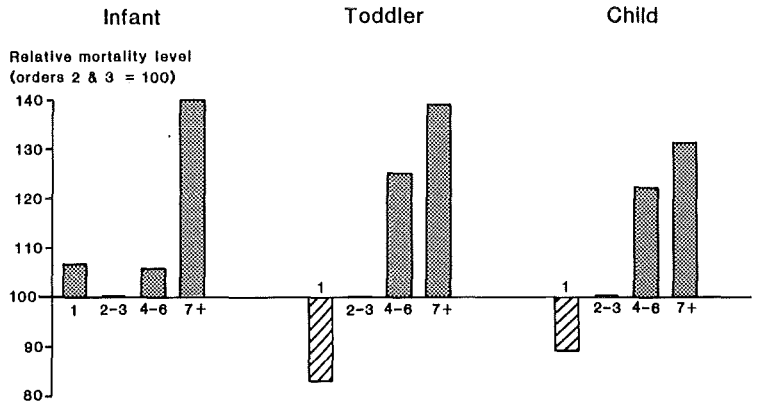

Figure 8 Mortality by birth order

Reporting error may also lead to longer than normal intervals, and the omission of dead children would be potentially biasing. However, the interviewers were especially instructed to probe for additional pregnancies when a pregnancy interval exceeded 36 months.

Table 15 shows infant, toddler and child mortality rates for children born after interbirth intervals of less than two years, between two and four years, and four or more years. Additionally the table shows rates restricted to children born after an interval of less than two years and whose preceding sibling (ie the one born at the start of the interval) survived until the child's birth or at least 23 months. This restriction is made to avoid the potentially spurious relationship between mortality and short intervals resulting from the correlated mortality of siblings and the shortening of the birth interval that would occur due to curtailment of breatfeeding upon the death of the preceding sibling. First births and multiple births (having no interval) have not been included in this table.

It is apparent that children born after a short birth interval are much more likely to perish at all ages below five years than children born after a more normal length of time. For infant mortality, there are no countries exceptional to the general conclusion, and only Ivory Coast, Malaysia and Senegal are exceptional for toddler mortality. Only Benin, Fiji, Mauritania, Mexico and Panama show substantially lower child mortality for short intervals. Overall there is some 77 per cent excess infant mortality for children born after short intervals (table 16).

Restricting the rates to children whose preceding sibling survived at least 24 months does lower the differential mortality somewhat, reducing the excess in infant mortality from 77 to 52 per cent. However, overall there is only a six percentage point difference in excess mortality of toddlers by survival status of preceding sibling and a reverse difference of two points for child mortality.

For many countries, short birth intervals may be related to factors which also may also be associated with higher mortality, in particular short durations of breastfeeding, perhaps brought about by the need of the mother to return to work.

There is less mortality among children born after longer than normal intervals, except at moderately low levels of infant mortality, where there is little difference. Overall infant mortality is 15 per cent lower among children born after long intervals. The reductions associated with longer than normal intervals are even greater for toddlers and children between two and five, being 33 and 25 per cent, respectively (see figure 9). It thus seems that the advantage gained by children born after long intervals is one of lessened competition for child care rather than a better physical constitution at birth.

The lower mortality of children born after long intervals has not apparently been accentuated by the omission of a dead preceding sibling since the omission would have resulted in a misclassification from a medium or a short interval to a long interval and would have reduced the mortality differences that truly occurred. However, real factors associated with long birth intervals could also be related to lowered mortality, confounding the true relationship with length of interval. One example that comes to mind is the lengthening of the birth interval due to the use of contraception, perhaps unsuccessfully, which is also related to level of education. Taking the results at face

Table 15 Mortality rates by months since previous birth – all intervals and intervals where preceding child survived[a] (0–9 years before survey)

Country	Infant ($_1q_0$)				Toddler ($_1q_1$)				Child ($_3q_2$)			
	Less than 24		24–47	48+	Less than 24		24–47	48+	Less than 24		24–47	48+
	All	Surv.			All	Surv.			All	Surv.		
Senegal	137.3	105.2	105.4	80.8	67.6	55.8	81.9	43.8	106.0	104.1	109.5	(105.5)
Yemen AR	220.5	184.5	94.4	64.4	74.8	72.2	34.2	19.2	83.2	81.2	35.3	(19.0)
Nepal	199.6	181.8	130.7	70.8	70.5	67.5	49.0	35.9	66.0	69.3	67.4	25.2
Bangladesh	184.9	161.3	89.0	58.2	41.9	44.3	28.4	9.8	81.3	89.6	61.9	27.2
Pakistan	183.4	152.2	103.2	70.8	41.8	40.0	33.9	17.1	61.5	65.5	44.8	24.6
Benin	158.4	109.7	107.3	79.1	52.3	46.9	42.1	23.4	77.5	73.5	81.2	(63.0)
Mauritania	111.7	86.2	63.7	60.0	46.4	39.7	44.9	(28.3)	74.0	62.5	79.5	(71.0)
Cameroon	143.1	127.6	74.0	63.5	55.5	55.2	35.1	17.9	78.5	83.0	57.6	45.5
Haiti	187.2	159.5	112.4	(90.6)	34.0	33.7	21.4	(35.3)	57.1	64.1	54.9	(42.1)
Egypt	203.1	173.2	96.8	54.8	73.5	69.4	39.5	19.9	60.3	65.3	40.4	14.6
Lesotho	201.7	(160.2)	114.0	88.5	40.3	(36.8)	26.8	28.2	26.7	(23.9)	24.5	27.3
Turkey	182.6	159.3	94.7	76.0	46.5	47.8	20.5	8.0	26.8	23.9	16.5	8.5
Nigeria	114.0	83.0	72.8	48.9	45.2	35.8	35.7	12.2	54.3	49.0	43.5	42.9
Ivory Coast	148.6	110.7	106.6	67.1	35.0	34.6	35.0	12.5	60.0	59.2	48.5	23.8
Indonesia	137.6	116.1	76.5	55.9	45.4	43.1	29.2	10.7	59.1	57.4	45.6	31.7
Peru	137.1	121.6	86.6	54.8	45.6	43.0	30.6	18.5	37.2	36.0	33.0	15.7
Morocco	130.2	117.9	66.2	50.1	45.6	41.1	26.2	14.7	41.6	42.8	24.8	19.5
Sudan (N)	98.3	79.2	60.4	37.3	37.2	34.6	26.1	17.5	49.9	49.8	40.4	(35.4)
Kenya	116.7	97.1	67.6	58.6	38.3	35.1	26.8	14.3	42.4	42.1	35.0	27.0
Dom. Rep.	104.8	88.0	75.1	(60.3)	33.5	30.7	21.2	(18.0)	23.9	24.2	16.0	(10.9)
Ghana	121.7	98.9	57.8	44.0	39.0	39.6	24.9	14.5	37.6	35.5	37.7	19.6
Ecuador	107.4	94.6	64.4	57.9	40.1	40.5	27.9	18.1	26.8	25.2	20.4	15.8
Colombia	81.7	71.7	52.9	38.1	22.9	21.5	16.2	16.6	27.2	26.4	20.8	(18.3)
Tunisia	121.8	109.3	48.9	23.9	39.4	36.4	17.3	12.1	31.6	32.9	18.4	9.0
Mexico	87.6	77.3	56.5	63.9	21.3	19.6	14.1	9.3	15.3	15.5	19.2	8.0
Philippines	72.3	68.1	45.3	53.7	19.8	18.7	14.6	6.1	27.7	27.5	19.5	11.5
Thailand	109.4	95.6	52.4	42.3	15.6	15.1	7.8	6.0	29.3	31.0	21.2	21.0
Syria	90.4	82.1	37.1	23.1	16.9	17.0	9.1	5.6	14.0	13.7	10.5	12.3
Sri Lanka	70.5	63.2	53.9	43.7	11.4	11.9	8.1	8.7	20.4	21.2	20.7	12.1
Paraguay	70.9	62.3	44.7	54.9	17.2	17.4	14.3	10.6	11.8	12.4	11.4	(8.2)
Jordan	86.5	77.6	35.5	38.0	16.7	16.5	8.9	1.0	9.1	10.2	4.9	(9.3)
Guyana	68.6	56.9	42.8	44.2	12.3	12.4	9.4	1.8	10.5	10.6	9.6	(4.2)
Venezuela	63.2	57.2	35.1	50.0	8.1	8.2	5.0	(6.4)	11.6	11.9	4.5	(4.9)
Costa Rica	84.1	73.6	54.2	42.3	10.5	9.5	7.7	5.9	8.1	8.5	8.2	0.0
Fiji	57.5	55.5	36.1	40.9	5.1	5.5	4.8	5.0	6.1	6.2	6.5	2.5
Korea, Rep. of	70.3	53.2	40.2	40.7	17.1	16.2	8.5	8.9	12.4	15.2	12.0	5.0
Jamaica	55.6	50.4	30.0	26.7	10.2	9.0	6.7	3.8	8.4	8.3	2.6	(4.0)
Trin. and Tob.	53.3	42.2	28.1	35.5	5.5	5.8	4.7	1.8	4.4	4.7	1.9	(3.6)
Malaysia	43.5	38.5	32.4	30.0	6.3	5.9	7.6	5.6	9.9	10.0	9.0	7.4
Panama	51.6	46.8	32.9	34.0	8.0	8.0	7.3	6.7	6.8	6.4	9.6	7.5
Portugal	72.5	65.0	27.3	25.5	5.7	4.7	3.7	2.0	3.5	3.8	0.0	3.1

[a] Preceding child survived until next birth or at least 24 months.

value, however, we see that delaying a child's birth by two years from a short to a long interval could almost halve the risk of death before age five.

Mortality of children from multiple births

It is well known that children from multiple births – twins, triplets, etc – have a much smaller chance of surviving infancy than children born singly, presumably due to lower birth weight, crowding in the womb and the greater likelihood of complications during delivery. The investigation of this subject with data from WFS surveys is limited because multiple births are quite rare. Only 15 900 (2.0 per cent) of the 776 634 children in the 41 countries represented here had come from multiple births. No country had more than 500 children of multiple births exposed during the nine years leading up to the survey so the results shown in table 17 must be viewed with caution. However, the differences in infant mortality are so large as to be compelling.

Table 16 Relative levels of infant, toddler and child mortality by length of time since the preceding birth

Mortality level	Infant ($_1q_0$)				Toddler ($_1q_1$)				Child ($_3q_2$)			
	Less than 24 months		24–47	48+	Less than 24 months		24–47	48+	Less than 24 months		24–47	48+
	All	Surv.			All	Surv.			All	Surv.		
Extremely high	175	144	100	68	140	134	100	54	132	135	100	61
Very high	179	149	100	77	155	150	100	73	125	124	100	70
High	174	148	100	74	154	145	100	60	129	128	100	69
Moderate to high	181	162	100	88	161	156	100	74	126	127	100	74
Moderate	174	152	100	106	139	136	100	70	158	165	100	93
All	177	152	100	85	150	144	100	67	136	138	100	75

NOTES:
1 Countries with rates in parentheses not included in calculation of relative level.
2 Surv. means that preceding sibling lived until next birth or at least 24 months.

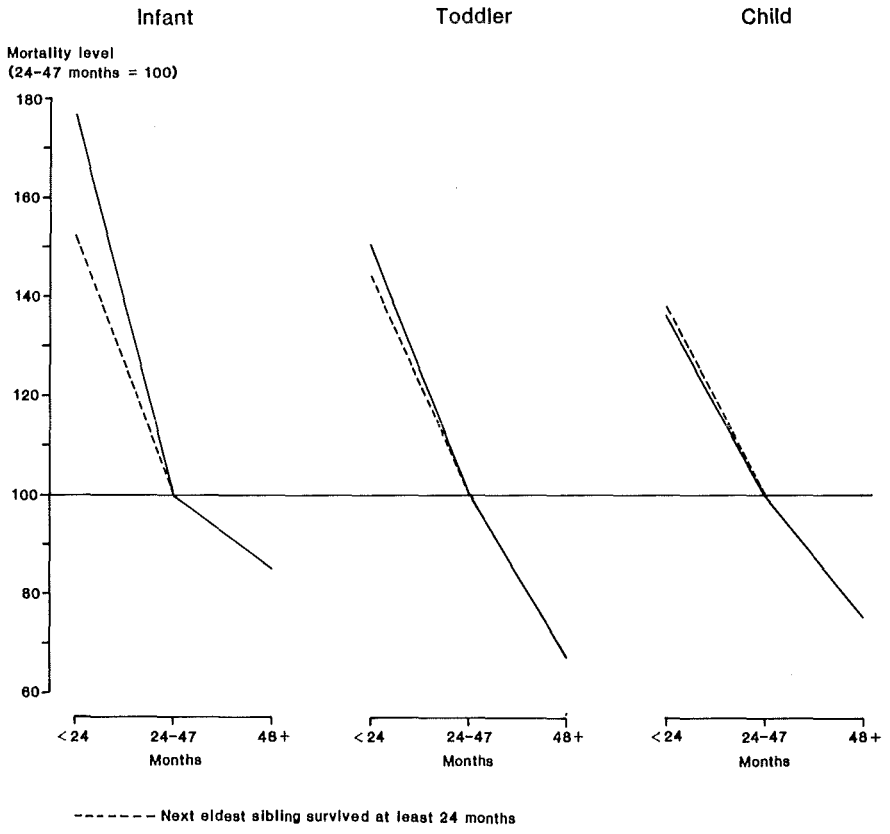

Figure 9 Relative levels of mortality by length of previous birth interval (24–47 months = 100)

In no country is the infant mortality rate for children of multiple births less than 140 per 1000, and in only seven countries – Fiji, Ghana, Jamaica, Korea, Paraguay, Portugal and Sudan – is it below 200 per 1000. As an overall average, children of multiple births have about four times the chance of dying during infancy.

Over one year of age there still exists substantial excess mortality for children of multiple births, presumably because of increased competition for food and child care, as was also seen for children born a short time after their preceding sibling.

Table 17 Infant, toddler and child mortality rates for multiple and single births (0–9 years before survey)

Country	Infant ($_1q_0$)		Toddler ($_1q_1$)		Child ($_3q_2$)	
	Mult.	Single	Mult.	Single	Mult.	Single
Senegal	(333.1)	109.9	(117.9)	76.0	(180.6)	105.4
Yemen AR	(507.7)	161.6	(45.5)	50.5	(290.8)	57.4
Nepal	(444.5)	145.9	(73.0)	51.8	(43.8)	59.2
Bangladesh	(548.3)	127.3	(68.6)	30.4	(54.3)	63.1
Pakistan	(533.6)	130.9	(43.6)	32.9	(42.2)	45.4
Benin	(358.2)	110.0	(58.7)	40.7	(117.1)	79.4
Mauritania	(248.6)	84.1	(70.1)	42.0	(120.9)	71.8
Cameroon	(312.1)	97.7	(82.0)	39.7	(67.7)	61.7
Haiti	(316.7)	129.2	(83.3)	28.1	(80.7)	54.0
Egypt	(443.2)	128.8	(100.7)	47.0	(43.1)	39.6
Lesotho	(380.3)	118.3	(58.6)	29.0	(16.2)	28.2
Turkey	(383.0)	131.4	(46.3)	27.3	(35.6)	18.7
Nigeria	(220.9)	84.9	(54.9)	34.5	(72.2)	44.8
Ivory Coast	(373.3)	119.3	(50.2)	33.5	(34.9)	47.6
Indonesia	(368.6)	93.7	(32.3)	30.3	(63.2)	46.3
Peru	(343.7)	98.7	(47.2)	33.2	(71.8)	29.3
Morocco	(362.9)	90.4	(44.2)	31.2	(10.3)	30.2
Sudan (N)	(193.5)	77.0	(95.5)	30.5	(74.0)	41.4
Kenya	(344.3)	85.7	(34.3)	30.5	(67.1)	35.6
Dom. Rep.	(327.1)	86.3	(41.9)	24.4	(11.4)	18.8
Ghana	(182.7)	70.0	(8.1)	24.8	(45.5)	36.5
Ecuador	(320.1)	76.7	(81.5)	28.4	(23.5)	21.4
Colombia	(309.3)	63.0	(33.7)	17.8	(36.6)	22.4
Tunisia	(287.8)	71.7	(21.9)	23.5	(22.2)	20.4
Mexico	(292.3)	70.1	(23.4)	15.9	(39.4)	15.4
Philippines	(265.9)	54.4	(27.0)	14.6	(55.9)	20.0
Thailand	(325.4)	69.0	(8.5)	8.9	(10.8)	22.1
Syria	(201.5)	62.5	(24.7)	11.3	(18.7)	11.7
Sri Lanka	(234.5)	55.3	(6.5)	9.5	(42.4)	17.1
Paraguay	(183.0)	54.8	(12.6)	13.0	(14.6)	10.6
Jordan	(310.4)	61.4	(29.8)	12.3	(11.8)	7.0
Guyana	(274.6)	54.0	(10.4)	9.8	(0.0)	8.8
Venezuela	(254.4)	45.6	(0.0)	6.4	(11.9)	8.0
Costa Rica	(276.6)	59.0	(10.8)	7.8	(14.7)	6.3
Fiji	(189.2)	46.2	(20.1)	4.3	(6.8)	5.2
Korea, Rep. of	(170.5)	45.9	(12.3)	9.7	(21.5)	12.1
Jamaica	(195.9)	38.6	(29.6)	8.7	(0.0)	5.9
Trin. and Tob.	(235.9)	39.3	(0.0)	4.2	(0.0)	3.7
Malaysia	(207.8)	35.8	(0.0)	6.0	(28.1)	8.2
Panama	(228.5)	38.1	(0.0)	6.6	(30.3)	7.8
Portugal	(148.5)	36.6	(8.5)	3.0	(8.6)	2.1

With the exception of the countries in the extremely high mortality group, there is an inverse relationship between the excess infant mortality of multiple births and the level of under-five mortality (see table 18). This relationship appears to arise from the greater reduction achieved in the infant mortality of children from single births. There does not appear to be any relationship for toddler or child mortality, which lends credence to the view that the excess mortality is due both to biological factors and competition during infancy, but mainly to competition at older ages.

Table 18 Ratio of mortality rates for children of multiple births to rates for children of single births

Mortality level	Infant mortality	Toddler mortality	Child mortality
Extremely high	(348)	(148)	(180)
Very high	(299)	(296)	(127)
High	(348)	(146)	(138)
Moderate to high	(419)	(153)	(168)
Moderate	(502)	(155)	(182)
All	(395)	(160)	(160)

NOTE:
Ratios are bracketed to call attention to the fact that the rates for children of multiple births are all based on less than 500 children exposed.

5 Conclusions

The main conclusions to be drawn from this study are:

1 There is a wide variation among the WFS countries in the current levels of infant, toddler and child mortality. Some countries have four to five times the number of deaths per 1000 children born than others

2 Mortality under age five years has been substantially reduced in the last 15–20 years in most countries.

3 The decline in the mortality of children under age five has occurred by approximately equal reductions in infant mortality and mortality at older ages under five. The decline in infant mortality was on average 25 deaths per 1000 births, and at older ages was 24 per 1000.

4 Although there is a wide variation among countries, male mortality is on average some 16 per cent higher than female mortality below one year of age, but is about the same level or slightly below female mortality at older ages under five.

5 Age of mother at birth has the expected U-shaped relationship with mortality, especially for infants, with higher mortality for mothers under 20 years and for mothers 35 years and older.

6 Order of birth also has a U-shaped relationship but only with infant mortality. First births have substantially increased infant mortality. At other ages under five, mortality increases with order. Children of very high orders, seventh and higher, are much more likely to die at all ages under five years.

7 Children born less than two years after the birth of their next oldest sibling are much more likely to die, even at ages over one year. Children born after long intervals of four or more years are much less likely to die at all ages than those born after more normal intervals of two to three years. Children born after short birth intervals are almost twice as likely to die under age five than are children born after long intervals.

8 Children from multiple births are more than four times more likely to die during infancy and substantially more likely to die at older ages.

9 The WFS-type of survey is likely to produce as good or better information on current levels of mortality under age five than vital statistics even in countries with systems that are considered complete, and produces the only reliable data for countries with incomplete systems.

10 A reduction of births to women aged under 20 or over 40 as well as to women at high parities, and a reduction of births after short intervals, might substantially reduce mortality in many countries.

Caution should be used in interpreting results since some portion of the differences in mortality by the demographic variables, particularly age of mother at birth, birth order and birth interval, may be due to their relationships with socio-economic variables, such as education, type of area of residence, and income, which in turn are undoubtedly related to mortality.

References and Bibliography

Abdel-Aziz, A. (1983). Evaluation of the Jordan Fertility Survey 1976. *WFS Scientific Reports* no 42.

Al-Tohamy, A.M. (forthcoming). Evaluation of the Yemen Arab Republic Fertility Survey 1979. *WFS Scientific Reports* no 76.

Alam, I. and J. Cleland (1981). Illustrative Analysis: Recent Fertility Trends in Sri Lanka. *WFS Scientific Reports* no 25.

Balkaran, S. (1982). Evaluation of the Guyana Fertility Survey 1975. *WFS Scientific Reports* no 26.

Blacker, J.G.C., A.G. Hill and K.A. Moser (1983). Mortality Levels and Trends in Jordan Estimated from the Results of the 1976 Fertility Survey. *WFS Scientific Reports* no 47.

Céspedes, Y. (1982). Evaluation of the Peru National Fertility Survey 1977–78. *WFS Scientific Reports* no 33.

Cheikh, A. (1984). Enquête Mauritanienne sur la Fécondité: Rapport d'évaluation. WFS unpublished MS.

Conim, C. (forthcoming). Evaluation of the Portugal Fertility Survey 1979. *WFS Scientific Reports* no 81.

El-Deeb, B. (1984). Evaluation of the Egypt Fertility Survey 1980. WFS unpublished MS.

Goldman, N., A.J. Coale and M. Weinstein (1979). The Quality of Data in the Nepal Fertility Survey. *WFS Scientific Reports* no 6.

Gueye, L. (1984). Enquête Sénégalaise sur la Fécondité: Rapport d'évaluation. *WFS Scientific Reports* no 49.

Guzmán, J. M. (1980a). Evaluation of the Dominican Republic National Fertility Survey 1975. *WFS Scientific Reports* no 14.

Guzmán, J. M. (1980b). Evaluación de la historia de embarazos en la encuesta nacional de fecundidad Costa Rica 1976. CELADE, serie C, no 1011.

Henin, R.A., A. Korten and L.H. Werner (1982). Evaluation of Birth Histories: a Case Study of Kenya. *WFS Scientific Reports* no 36.

Hobcraft, J.N. (1980). Illustrative Analysis: Evaluating Fertility Levels and Trends in Colombia. *WFS Scientific Reports* no 15.

Hobcraft, J. and G. Rodríguez (1982). The Analysis of Repeat Fertility Surveys: Examples from Dominican Republic. *WFS Scientific Reports* no 29.

Hunte, D. (1983). Evaluation of the Trinidad and Tobago Fertility Survey 1977. *WFS Scientific Reports* no 44.

Meegama, S.A. (1980). Socio-Economic Determinants of Infant and Child Mortality in Sri Lanka: an Analysis of Post-War Experience. *WFS Scientific Reports* no 8.

Mott, F.L. (1982). Infant Mortality in Kenya: Evidence from the Kenya Fertility Survey. *WFS Scientific Reports* no 32.

Ordorica, M. and J.E. Potter (1981). Evaluation of the Mexican Fertility Survey 1976–77. *WFS Scientific Reports* no 21.

Reyes, F. (1981). Evaluation of the Republic of the Philippines Fertility Survey 1978. *WFS Scientific Reports* no 19.

Rizgalla, M. (forthcoming). Evaluation of the Sudan Fertility Survey 1978–9. *WFS Scientific Reports* no 72.

Rivadeneira, M.I.H. de (1984). Evaluación de la Encuesta Nacional de Fecundidad de 1979: Ecuador. *WFS Scientific Reports* no 51.

Rutstein, S.O. (1983). Infant and Child Mortality: Levels, Trends and Demographic Differentials. *WFS Comparative Studies* no 24.

Rutstein, S.O. (1984). The Quality of WFS Data for Direct Estimates of Infant and Child Mortality. Background Paper. WFS 1984 Symposium.

Schoemaker, J.F. (1984). Evaluación de la Encuesta Nacional de Fecundidad del Paraguay de 1979. *WFS Scientific Reports* no 62.

Singh, S. (1982). Evaluation of the Jamaica Fertility Survey 1975–76. *WFS Scientific Reports* no 34.

Singh, S. (1984). Comparability of Questionnaires: Forty-one WFS Countries. *WFS Comparative Studies* no 32.

Somoza, J.L. (1980). Illustrative Analysis: Infant and Child Mortality in Colombia. *WFS Scientific Reports* no 10.

Supraptilah, B. (1982). Evaluation of the Indonesian Fertility Survey 1976. *WFS Scientific Reports* no 38.

Tardieu, C. (1984). Evaluation des données de l'Enquête Haïtienne sur la Fecondité. *WFS Scientific Reports* no 50.

Üner, S. (1983). Evaluation of the Turkish Fertility Survey 1978. *WFS Scientific Reports* no 43.

Vielma, G. (1982). Evaluation of the Venezuela Fertility Survey 1977. *WFS Scientific Reports* no 35.

Yatim, M.M. (1982). Evaluation of the Malaysian Fertility and Family Survey 1974. *WFS Scientific Reports* no 27.

Appendix A – Detailed Tables

BENIN 1981-2: A1. Probabilities of infant and child death by period and sex of child

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Males							
NN	58.1	71.7	77.7	97.4	(81.3)	(84.7)	(200.0)
P-NN	59.8	72.7	70.6	98.8	(95.1)	(111.7)	(151.3)
1q0	117.9	144.5	148.4	196.2	(176.4)	(196.4)	(351.3)
2q0	151.9	185.9	192.6	238.8	(218.6)	(245.5)	(423.4)
5q0	214.8	264.1	268.5	(320.0)	(315.4)	(303.4)	—
1q1	38.6	48.5	51.9	52.9	(51.3)	(61.1)	(111.1)
3q2	74.1	96.0	94.0	(106.7)	(123.8)	(76.7)	—
4q1	109.8	139.8	141.0	(154.0)	(168.8)	(133.1)	—
Females							
NN	40.8	57.5	61.2	80.4	(89.2)	(66.5)	(136.4)
P-NN	55.9	70.0	67.4	66.0	(113.5)	(125.7)	(96.0)
1q0	96.7	127.5	128.6	146.4	(202.7)	(192.2)	(232.3)
2q0	128.1	167.8	156.6	179.7	(234.5)	(266.3)	(232.3)
5q0	193.0	236.5	240.2	(260.0)	(364.8)	(337.1)	—
1q1	34.7	46.2	32.2	39.0	(39.9)	(91.8)	(0.0)
3q2	74.5	82.5	99.1	(97.9)	(170.2)	(96.4)	—
4q1	106.6	125.0	128.1	(133.1)	(203.4)	(179.4)	—
Both sexes							
NN	49.7	64.9	69.5	88.8	85.4	(76.2)	(173.1)
P-NN	57.9	71.4	69.0	82.2	104.2	(118.9)	(131.5)
1q0	107.6	136.3	138.5	171.1	189.6	(195.0)	(304.6)
2q0	140.3	177.2	174.5	208.9	226.8	(257.1)	(352.6)
5q0	204.2	250.8	254.3	289.7	(339.3)	(321.0)	—
1q1	36.7	47.4	41.8	45.7	45.9	(77.1)	(69.0)
3q2	74.3	89.4	96.7	102.1	(145.4)	(86.0)	—
4q1	108.2	132.6	134.4	143.1	(184.7)	(156.5)	—

BENIN 1981-2: A3. Children exposed to mortality by period

Age of exposure (months)	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
0- 1	4451	3452	2540	1734	967	355	52
1- 3	4180	3211	2337	1576	871	311	41
3- 6	4038	3130	2277	1521	829	288	33
6-12	3842	2970	2169	1409	748	241	24
12-24	3600	2745	1973	1249	610	188	15
24-36	3334	2437	1755	1066	474	131	5
36-48	3064	2197	1544	894	384	84	1
48-60	2792	2010	1339	743	287	43	0

BENIN 1981-2: A2. Probabilities of infant and child death by period and age at birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 20 years							
NN	54.6	60.9	70.0	(110.7)	(113.6)	(82.5)	(173.1)
P-NN	78.7	72.4	79.7	(102.4)	(117.6)	(129.5)	(131.5)
1q0	133.2	133.4	149.7	(213.0)	(231.1)	(211.9)	(304.6)
2q0	(170.6)	178.9	(189.7)	(249.6)	(279.5)	(275.0)	(352.6)
5q0	(236.5)	(259.2)	(258.7)	(329.8)	(382.2)	(340.3)	—
1q1	(43.0)	52.6	(47.1)	(46.5)	(62.9)	(80.0)	(69.0)
3q2	(79.6)	(97.7)	(85.1)	(106.8)	(142.6)	(90.1)	—
4q1	(119.2)	(145.2)	(128.2)	(148.3)	(196.5)	(162.9)	—
20 to 29							
NN	44.4	60.7	73.9	79.9	66.8	(68.5)	—
P-NN	57.3	65.5	65.5	76.2	(95.1)	(102.2)	—
1q0	101.8	126.2	139.4	156.0	(161.9)	(170.7)	—
2q0	134.1	166.9	173.8	196.1	(191.3)	(229.9)	—
5q0	196.1	240.3	254.1	(277.1)	(307.2)	(289.2)	—
1q1	36.0	46.5	40.1	47.4	(35.0)	(71.4)	—
3q2	71.7	88.1	97.1	(100.8)	(143.4)	(76.9)	—
4q1	105.1	130.5	133.3	(143.4)	(173.4)	(142.9)	—
30 to 39							
NN	51.1	79.4	56.8	(82.3)	—	—	—
P-NN	48.0	84.1	(65.3)	(58.3)	—	—	—
1q0	99.0	163.4	(122.1)	(140.6)	—	—	—
2q0	131.1	199.4	(157.4)	(154.8)	—	—	—
5q0	198.3	(267.5)	(256.0)	(170.4)	—	—	—
1q1	35.7	43.0	(40.2)	(16.5)	—	—	—
3q2	77.3	(85.1)	(117.0)	(18.5)	—	—	—
4q1	110.2	(124.4)	(152.5)	(34.7)	—	—	—
40 or more							
NN	(99.2)	(46.2)	—	—	—	—	—
P-NN	(60.8)	(74.3)	—	—	—	—	—
1q0	(159.9)	(120.5)	—	—	—	—	—
2q0	(185.3)	(184.9)	—	—	—	—	—
5q0	(244.1)	(235.8)	—	—	—	—	—
1q1	(30.2)	(73.2)	—	—	—	—	—
3q2	(72.2)	(62.5)	—	—	—	—	—
4q1	(100.2)	(131.1)	—	—	—	—	—

BENIN 1981-2: A4. Probabilities of infant and child death by period and birth order

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
First births							
NN	52.9	52.8	65.2	(92.5)	(99.9)	(50.3)	(94.1)
P-NN	52.8	55.1	73.7	(70.3)	(97.3)	(131.0)	(130.8)
1q0	105.7	107.9	139.0	(162.8)	(197.1)	(181.3)	(225.0)
2q0	133.7	141.9	(171.7)	(200.0)	(233.1)	(236.9)	(284.6)
5q0	199.0	(219.9)	(238.9)	(302.8)	(335.6)	(299.2)	—
1q1	31.3	38.1	(38.0)	(44.5)	(44.8)	(67.9)	(76.9)
3q2	75.4	(90.9)	(81.1)	(128.5)	(133.6)	(81.6)	—
4q1	104.4	(125.6)	(116.0)	(167.3)	(172.4)	(144.0)	—
Second and third births							
NN	35.1	57.7	61.2	80.4	(73.1)	(83.6)	(470.6)
P-NN	59.5	57.0	63.8	86.2	(102.5)	(106.5)	(151.3)
1q0	94.6	114.7	125.0	166.7	(175.7)	(190.1)	(621.8)
2q0	127.4	150.0	169.1	205.5	(215.4)	(257.0)	(621.8)
5q0	195.9	226.1	256.9	(279.5)	(341.9)	(331.3)	—
1q1	36.3	39.8	50.4	46.7	(48.2)	(82.6)	(0.0)
3q2	78.4	89.6	105.7	(93.2)	(161.3)	(100.0)	—
4q1	111.8	125.8	150.8	(135.5)	(201.7)	(174.3)	—
Fourth to sixth births							
NN	48.0	70.1	75.2	(102.6)	(86.1)	(416.7)	(0.0)
P-NN	53.9	87.9	69.0	(92.7)	(133.9)	(0.0)	(0.0)
1q0	101.8	158.0	144.2	(195.3)	(220.1)	(416.7)	(0.0)
2q0	142.3	212.5	179.3	(231.9)	(251.8)	(0.0)	(0.0)
5q0	200.1	281.8	(263.5)	(290.3)	(334.9)	(0.0)	(0.0)
1q1	45.0	64.8	41.0	(45.5)	(40.7)	(0.0)	—
3q2	67.4	87.9	(102.6)	(76.1)	(111.1)	—	—
4q1	109.4	147.0	(139.4)	(118.1)	(147.2)	(0.0)	—
Seventh or higher order births							
NN	78.2	(90.3)	(95.2)	(46.5)	(0.0)	—	—
P-NN	69.0	(96.2)	(77.9)	(26.9)	(0.0)	—	—
1q0	147.2	(186.5)	(173.2)	(73.4)	(0.0)	—	—
2q0	170.3	(220.0)	(179.7)	(112.8)	(0.0)	—	—
5q0	(235.0)	(292.1)	(239.2)	(144.5)	—	—	—
1q1	27.1	(41.1)	(7.8)	(42.6)	(0.0)	—	—
3q2	(78.0)	(92.5)	(72.6)	(35.7)	—	—	—
4q1	(102.9)	(129.8)	(79.9)	(76.7)	—	—	—

BENIN 1981-2: A5. Probabilities of infant and child death by period and previous birth interval

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 24 months--ALL intervals							
NN	53.3	96.5	95.4	(114.7)	(88.2)	(150.5)	(500.0)
P-NN	83.9	87.2	(73.2)	(128.7)	(166.5)	(151.0)	(0.0)
1q0	137.2	183.7	(168.6)	(243.4)	(254.6)	(301.5)	(500.0)
2q0	178.8	230.6	(198.7)	(291.1)	(307.0)	(437.3)	(500.0)
5q0	244.0	(288.6)	(270.7)	(343.5)	(404.0)	(503.5)	—
1q1	48.3	57.5	(36.2)	(63.0)	(70.4)	(194.4)	(0.0)
3q2	79.3	(75.5)	(89.8)	(73.8)	(140.0)	(117.6)	—
4q1	123.8	(128.6)	(122.7)	(132.2)	(200.5)	(289.2)	—
24 to 47 months							
Less than 24 months--SURVIVING intervals only							
NN	42.8	(63.8)	(45.1)	(53.3)	(65.1)	(40.8)	(500.0)
P-NN	58.9	(56.3)	(37.2)	(101.2)	(58.7)	(157.3)	(0.0)
1q0	101.7	(120.1)	(82.4)	(154.5)	(123.8)	(198.1)	(500.0)
2q0	142.6	(163.0)	(117.1)	(209.1)	(155.3)	(282.5)	(500.0)
5q0	(208.8)	(221.0)	(184.2)	(247.3)	(264.4)	(282.5)	—
1q1	45.6	(48.7)	(37.9)	(64.6)	(36.0)	(105.3)	(0.0)
3q2	(77.2)	(69.3)	(76.0)	(48.2)	(129.1)	(0.0)	—
4q1	(119.3)	(114.7)	(111.0)	(109.7)	(160.4)	(105.3)	—
NN	38.4	53.3	58.0	71.4	(60.0)	(60.6)	(0.0)
P-NN	52.0	75.6	68.5	59.5	(86.5)	(85.5)	(0.0)
1q0	90.5	128.9	126.5	130.9	(146.6)	(146.1)	(0.0)
2q0	123.9	171.8	166.8	168.9	(179.2)	(193.5)	(0.0)
5q0	190.2	245.4	255.4	(250.0)	(285.4)	(266.8)	(0.0)
1q1	36.7	49.2	46.2	43.8	(38.3)	(55.6)	—
3q2	75.7	89.0	106.3	(97.6)	(129.3)	(90.9)	—
4q1	109.6	133.8	147.6	(137.1)	(162.7)	(141.4)	—
48 or more months							
NN	(47.3)	(57.7)	(60.9)	(31.7)	(72.3)	(200.0)	(0.0)
P-NN	(24.9)	(32.5)	(36.2)	(124.2)	(27.3)	(0.0)	(0.0)
1q0	(72.1)	(90.2)	(97.1)	(156.0)	(99.6)	(200.0)	(0.0)
2q0	(92.1)	(114.3)	(130.4)	(169.3)	(137.1)	(200.0)	(0.0)
5q0	(146.4)	(173.9)	(178.9)	(202.6)	(366.4)	—	(0.0)
1q1	(21.5)	(26.4)	(36.9)	(15.7)	(41.7)	(0.0)	—
3q2	(59.8)	(67.4)	(55.9)	(40.2)	(265.7)	—	—
4q1	(80.0)	(92.0)	(90.7)	(55.3)	(296.3)	—	—

BENIN 1981-2: A6. Probabilities of infant and child death by period and whether multiple birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Multiple births							
NN	(244.5)	(184.8)	(144.3)	(300.0)	(181.8)	(500.0)	(0.0)
P-NN	(135.7)	(145.3)	(59.2)	(179.2)	(152.8)	(0.0)	(0.0)
1q0	(380.2)	(330.0)	(203.5)	(479.2)	(334.7)	(500.0)	(0.0)
2q0	(414.7)	(372.7)	(235.8)	(515.1)	(334.7)	(500.0)	(0.0)
5q0	(428.7)	(529.1)	(381.8)	(559.2)	(665.6)	—	(0.0)
1q1	(55.6)	(63.7)	(40.5)	(69.0)	(0.0)	(0.0)	—
3q2	(23.9)	(249.4)	(191.0)	(90.9)	(497.4)	—	—
4q1	(78.1)	(297.2)	(223.8)	(153.6)	(497.4)	—	—
Single births							
NN	41.3	59.9	66.5	80.0	81.9	(66.4)	(140.0)
P-NN	54.3	68.4	69.4	78.1	102.6	(121.3)	(136.8)
1q0	95.7	128.4	135.9	158.1	184.6	(187.7)	(276.8)
2q0	128.2	169.2	172.1	196.0	223.0	(251.0)	(326.7)
5q0	194.5	239.0	249.4	278.2	(328.9)	(315.5)	—
1q1	36.0	46.9	41.9	45.1	47.1	(78.0)	(69.0)
3q2	76.0	84.0	93.4	102.2	(136.4)	(86.1)	—
4q1	109.3	126.9	131.4	142.7	(177.1)	(157.4)	—

BENIN 1981-2: A7. Probabilities of infant and child death by calendar years and sex of child

Measure	Calendar years 1975-9	1970-4	1965-9	1960-4	1955-9	1950-4	1945-9
Males							
NN	62.8	84.3	74.9	100.0	(90.9)	(107.5)	(0.0)
P-NN	71.5	74.2	75.6	(95.9)	(115.8)	(68.2)	—
1q0	134.4	158.5	150.4	(195.9)	(206.8)	(175.7)	—
2q0	161.5	200.9	202.6	(238.7)	(237.3)	(254.2)	—
5q0	223.6	266.0	(285.8)	(356.4)	(323.8)	(254.2)	—
1q1	31.3	50.4	61.3	(53.2)	(38.5)	(95.2)	—
3q2	74.0	81.4	(104.3)	(154.6)	(113.5)	(0.0)	—
4q1	103.0	127.7	(159.3)	(199.6)	(147.6)	(95.2)	—
Females							
NN	53.4	55.9	72.5	92.2	(68.4)	(75.3)	(0.0)
P-NN	66.6	66.4	69.2	(78.1)	(127.8)	(93.2)	(0.0)
1q0	120.0	122.3	141.7	(170.3)	(196.2)	(168.4)	(0.0)
2q0	156.5	159.7	172.6	(207.7)	(243.3)	(270.3)	—
5q0	217.5	241.8	(247.8)	(326.5)	(380.5)	(452.7)	—
1q1	41.6	42.6	36.0	(45.1)	(58.6)	(122.4)	—
3q2	72.3	97.7	(90.9)	(150.0)	(181.3)	(250.0)	—
4q1	110.9	136.2	(123.6)	(188.3)	(229.3)	(341.8)	—
Both sexes							
NN	58.3	70.6	73.7	96.0	80.2	(91.4)	(0.0)
P-NN	69.2	70.5	72.4	86.8	(121.5)	(79.6)	(166.7)
1q0	127.4	141.2	146.0	182.7	(201.7)	(171.0)	(166.7)
2q0	159.2	181.1	187.2	222.8	(240.0)	(262.1)	—
5q0	220.9	254.7	266.3	(341.7)	(358.1)	(314.8)	—
1q1	36.4	46.5	48.2	49.0	(47.9)	(109.9)	—
3q2	73.3	89.8	97.3	(153.0)	(155.4)	(71.4)	—
4q1	107.1	132.2	140.8	(194.5)	(195.9)	(173.5)	—

BENIN 1981-2: A8. Probabilities of infant and child death by cohort of birth

Measure	Year of birth prior to survey 1-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
NN	52.6	64.3	70.6	86.3	87.3	(74.5)	(166.7)
P-NN	55.3	69.2	71.8	78.9	102.5	(111.7)	(129.6)
1q0	107.9	133.5	142.4	165.2	189.8	(186.2)	(296.3)
2q0	139.7*	169.8	182.2	200.7	228.4	(228.7)	(388.9)
5q0	--	230.1	257.5	276.7	313.7	(337.8)	(444.4)
1q1	35.6*	41.9	46.4	42.5	47.6	(52.3)	(131.6)
3q2	--	72.6	92.1	95.1	110.5	(141.4)	(90.9)
4q1	--	111.5	134.2	133.6	152.9	(186.3)	(210.5)

CAMEROON 1978: A1. Probabilities of infant and child death by period and sex of child

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Males							
NN	54.2	51.0	60.3	66.2	105.0	81.3	(84.3)
P-NN	60.8	50.5	68.2	83.1	95.3	(137.7)	(159.0)
1q0	115.0	101.5	128.5	149.3	200.3	(219.0)	(243.3)
2q0	149.6	138.3	175.9	190.3	237.1	(280.1)	(327.0)
5q0	200.0	194.9	245.1	260.9	(296.9)	(399.0)	(470.0)
1q1	39.1	41.0	54.4	48.2	46.0	(78.2)	(110.6)
3q2	59.3	65.7	84.0	87.2	(78.3)	(165.2)	(212.5)
4q1	96.1	104.0	133.8	131.1	(120.8)	(230.5)	(299.6)
Females							
NN	39.9	42.9	62.1	46.8	73.1	58.3	(89.4)
P-NN	55.7	61.4	79.2	71.7	97.8	(116.4)	(118.1)
1q0	95.6	104.3	141.2	118.5	170.9	(174.7)	(207.5)
2q0	135.2	141.4	174.4	150.5	212.1	(227.8)	(256.8)
5q0	189.7	192.5	240.1	221.5	(284.6)	(297.4)	(339.3)
1q1	43.8	41.4	38.6	36.3	49.7	(64.3)	(62.2)
3q2	63.0	59.6	79.7	83.6	(92.0)	(90.2)	(111.1)
4q1	104.1	98.5	115.2	116.9	(137.2)	(148.7)	(166.3)
Both sexes							
NN	47.3	47.1	61.2	56.3	89.1	70.0	(86.8)
P-NN	58.3	55.8	73.6	77.2	96.6	127.4	(138.7)
1q0	105.6	102.8	134.7	133.5	185.8	197.4	(225.6)
2q0	142.6	139.8	175.1	169.9	224.8	254.8	(291.9)
5q0	195.0	193.8	242.5	240.7	291.0	(351.1)	(406.6)
1q1	41.4	41.2	46.7	41.9	47.9	71.5	(85.7)
3q2	61.1	62.8	81.7	85.3	85.5	(129.3)	(161.9)
4q1	100.0	101.4	124.6	123.7	129.3	(191.5)	(233.7)

CAMEROON 1978: A3. Children exposed to mortality by period

Age of exposure (months)	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
0- 1	7546	6377	4557	3347	2061	1085	346
1- 3	7156	6056	4225	3148	1838	996	293
3- 6	6999	5843	4092	3019	1742	918	256
6-12	6823	5542	3931	2804	1635	800	234
12-24	6515	5096	3678	2544	1444	655	185
24-36	6056	4556	3287	2218	1206	494	131
36-48	5663	4135	2936	1890	976	361	91
48-60	5366	3749	2649	1626	805	272	68

CAMEROON 1978: A2. Probabilities of infant and child death by period and age at birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 20 years							
NN	57.0	55.2	67.1	51.6	104.3	86.0	(92.3)
P-NN	72.9	44.6	85.9	75.1	99.0	(135.1)	(143.7)
1q0	129.9	99.8	152.9	126.7	203.3	(221.1)	(236.0)
2q0	170.9	153.2	193.3	167.3	232.1	(289.5)	(298.3)
5q0	221.2	188.3	263.9	225.7	(293.4)	(389.0)	(412.3)
1q1	47.1	59.3	47.7	46.4	36.2	(87.8)	(81.6)
3q2	60.7	41.5	87.5	70.1	(79.7)	(139.9)	(162.5)
4q1	105.0	98.3	131.0	113.3	(113.0)	(215.5)	(230.9)
20 to 29							
NN	42.1	41.6	66.0	64.3	79.8	55.5	(72.8)
P-NN	52.1	55.1	73.2	79.3	91.5	(119.2)	(118.9)
1q0	94.1	96.6	139.2	143.6	171.3	(174.7)	(191.7)
2q0	130.4	132.5	183.2	175.7	218.1	(219.4)	(275.9)
5q0	179.1	190.0	245.6	257.7	(289.3)	(308.9)	(369.7)
1q1	40.1	39.6	51.0	37.5	56.5	(54.2)	(104.1)
3q2	56.0	66.4	76.4	99.5	(91.1)	(114.6)	(129.6)
4q1	93.8	103.4	123.5	133.3	(142.4)	(162.6)	(220.3)
30 to 39							
NN	50.7	49.8	44.5	34.8	(76.7)	—	—
P-NN	48.7	60.3	61.8	(72.6)	(140.5)	—	—
1q0	99.4	110.1	106.3	(107.4)	(217.2)	—	—
2q0	136.9	136.8	135.8	(153.2)	(245.7)	—	—
5q0	191.1	202.1	(215.5)	(194.8)	(245.7)	—	—
1q1	41.7	30.0	33.0	(51.3)	(36.4)	—	—
3q2	62.7	75.7	(92.2)	(49.1)	(0.0)	—	—
4q1	101.8	103.4	(122.2)	(97.9)	(36.4)	—	—
40 or more							
NN	(44.8)	(53.9)	(19.5)	—	—	—	—
P-NN	(100.5)	(91.3)	(25.8)	—	—	—	—
1q0	(145.2)	(145.1)	(45.3)	—	—	—	—
2q0	(171.6)	(173.5)	(122.3)	—	—	—	—
5q0	(255.4)	(218.7)	(122.3)	—	—	—	—
1q1	(30.8)	(33.2)	(80.7)	—	—	—	—
3q2	(101.2)	(54.7)	(0.0)	—	—	—	—
4q1	(128.9)	(86.0)	(80.7)	—	—	—	—

CAMEROON 1978: A4. Probabilities of infant and child death by period and birth order

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
First births							
NN	58.1	54.3	62.2	66.1	93.6	(87.5)	(85.1)
P-NN	73.5	55.2	72.4	72.5	93.5	(123.0)	(120.5)
1q0	131.6	109.5	134.6	138.5	187.1	(210.5)	(205.6)
2q0	168.9	147.6	178.9	176.6	(218.8)	(271.9)	(274.4)
5q0	212.4	198.7	242.4	263.1	(280.5)	(351.5)	(397.3)
1q1	42.9	42.8	51.1	44.2	(38.9)	(77.8)	(86.6)
3q2	52.3	59.9	77.4	105.0	(79.0)	(109.2)	(169.4)
4q1	93.0	100.2	124.6	144.5	(114.9)	(178.6)	(241.3)
Second and third births							
NN	51.9	38.9	56.6	49.2	78.3	(48.1)	(108.1)
P-NN	48.7	45.2	72.5	76.3	85.1	(123.8)	(173.5)
1q0	100.7	84.1	129.2	125.5	163.4	(172.0)	(281.6)
2q0	134.1	127.7	166.1	155.7	199.9	(230.3)	(347.4)
5q0	182.4	172.7	231.1	219.8	(268.6)	(364.8)	(453.7)
1q1	37.2	47.6	42.4	34.6	43.6	(70.5)	(91.6)
3q2	55.7	51.6	78.0	75.9	(85.8)	(174.7)	(162.9)
4q1	90.9	96.7	117.0	107.8	(125.7)	(232.9)	(239.5)
Fourth to sixth births							
NN	36.2	44.2	68.9	57.2	(100.6)	(84.2)	(0.0)
P-NN	55.5	57.7	74.8	76.6	(119.0)	(161.2)	(77.5)
1q0	91.7	101.8	143.7	133.8	(219.5)	(245.3)	(77.5)
2q0	131.3	134.1	187.9	174.5	(283.2)	(286.0)	(122.2)
5q0	183.1	194.5	250.5	(233.3)	(359.9)	(339.1)	(122.2)
1q1	43.5	36.0	51.6	47.0	(81.5)	(53.9)	(48.4)
3q2	59.6	69.7	77.1	(71.2)	(107.1)	(74.4)	(0.0)
4q1	100.6	103.1	124.8	(114.8)	(179.9)	(124.2)	(48.4)
Seventh or higher order births							
NN	46.8	59.3	(50.2)	(56.7)	(102.1)	(0.0)	—
P-NN	63.3	75.6	(76.2)	(102.2)	(133.3)	(32.2)	—
1q0	110.1	134.9	(126.3)	(158.9)	(235.4)	(32.2)	—
2q0	149.0	165.4	(157.3)	(210.6)	(235.4)	(32.2)	—
5q0	222.5	(232.5)	(267.2)	(293.0)	(263.3)	—	—
1q1	43.7	35.2	(35.5)	(61.4)	(0.0)	(0.0)	—
3q2	86.3	(80.5)	(130.4)	(104.4)	(36.6)	—	—
4q1	126.2	(112.9)	(161.2)	(159.4)	(36.6)	—	—

CAMEROON 1978: A5. Probabilities of infant and child death by period and previous birth interval

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 24 months--ALL intervals							
NN	73.3	62.7	79.1	62.4	(115.1)	(76.0)	(87.0)
P-NN	69.7	73.7	117.7	106.4	(129.3)	(128.1)	(177.6)
1q0	143.0	136.3	196.8	168.8	(244.4)	(204.1)	(264.6)
2q0	183.8	185.7	251.2	206.0	(305.5)	(252.3)	(328.4)
5q0	248.6	251.7	330.1	(275.2)	(366.0)	(386.6)	(463.4)
1q1	47.7	57.2	67.8	44.8	(80.9)	(60.7)	(86.7)
3q2	79.4	81.0	105.3	(87.2)	(87.1)	(179.6)	(201.1)
4q1	123.2	133.6	166.0	(128.1)	(161.0)	(229.4)	(270.4)
Less than 24 months--SURVIVING intervals only							
NN	65.6	45.4	56.4	48.3	(95.0)	(38.4)	(67.8)
P-NN	61.4	69.0	97.6	87.6	(100.7)	(89.8)	(159.9)
1q0	127.0	114.4	154.0	135.9	(195.6)	(128.1)	(227.6)
2q0	167.4	163.0	205.6	(172.0)	(268.3)	(156.8)	(268.8)
5q0	235.0	233.4	288.2	(241.6)	(316.1)	(343.0)	(401.1)
1q1	46.3	54.9	61.0	(41.8)	(90.4)	(32.8)	(53.3)
3q2	81.2	84.0	103.9	(84.1)	(65.3)	(220.9)	(180.8)
4q1	123.8	134.3	158.5	(122.4)	(149.8)	(246.5)	(224.5)
24 to 47							
NN	27.6	32.2	51.0	39.1	63.9	(40.0)	(85.5)
P-NN	41.6	46.6	52.0	68.8	79.4	(123.7)	(154.1)
1q0	69.2	78.8	103.0	107.9	143.3	(163.6)	(239.6)
2q0	105.7	111.6	138.3	146.0	175.1	(221.2)	(313.8)
5q0	153.3	163.5	209.1	210.7	(248.8)	(326.9)	(385.7)
1q1	39.3	35.5	39.4	42.7	37.2	(68.8)	(97.6)
3q2	53.2	58.4	82.2	75.7	(89.3)	(135.7)	(104.7)
4q1	90.3	91.9	118.3	115.2	(123.1)	(195.2)	(192.1)
48 or more months							
NN	29.7	37.0	(32.7)	(54.2)	(49.8)	(0.0)	(0.0)
P-NN	35.8	32.8	(39.6)	(18.0)	(54.4)	(85.5)	(0.0)
1q0	65.5	69.8	(72.2)	(72.2)	(104.2)	(85.5)	(0.0)
2q0	88.6	(81.1)	(85.7)	(82.3)	(129.5)	(120.2)	(0.0)
5q0	142.9	(121.6)	(107.3)	(114.2)	(196.7)	(120.2)	—
1q1	24.7	(12.2)	(14.5)	(10.9)	(28.2)	(37.9)	(0.0)
3q2	59.6	(44.0)	(23.7)	(34.7)	(77.2)	(0.0)	—
4q1	82.9	(55.7)	(37.8)	(45.3)	(103.2)	(37.9)	—

CAMEROON 1978: A6. Probabilities of infant and child death by period and whether multiple birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Multiple births							
NN	(141.1)	(156.0)	(150.5)	(285.6)	(223.6)	(197.8)	(426.3)
P-NN	(195.6)	(158.6)	(103.8)	(90.2)	(151.5)	(464.2)	(167.4)
1q0	(336.7)	(314.6)	(254.3)	(375.8)	(375.1)	(662.0)	(593.8)
2q0	(382.5)	(380.6)	(265.9)	(479.8)	(454.0)	(723.4)	(593.8)
5q0	(437.2)	(409.1)	(297.0)	(515.2)	(567.2)	(853.2)	(593.8)
1q1	(69.0)	(96.2)	(15.7)	(166.6)	(126.2)	(181.6)	(0.0)
3q2	(88.6)	(46.0)	(42.3)	(67.9)	(207.4)	(469.4)	(0.0)
4q1	(151.5)	(137.8)	(57.3)	(223.3)	(307.5)	(565.7)	(0.0)
Single births							
NN	43.9	44.0	58.0	51.3	84.8	67.5	(74.5)
P-NN	53.6	52.7	72.5	76.9	94.8	120.9	(137.4)
1q0	97.5	96.7	130.5	128.2	179.6	188.4	(211.9)
2q0	134.3	132.8	171.8	162.7	217.4	245.9	(280.7)
5q0	186.7	187.6	240.2	234.4	282.4	(341.6)	(399.4)
1q1	40.7	39.9	47.5	39.6	46.0	70.8	(87.3)
3q2	60.5	63.2	82.5	85.6	83.1	(126.9)	(165.0)
4q1	98.8	100.6	126.1	121.8	125.3	(188.8)	(237.9)

CAMEROON 1978: A8. Probabilities of infant and child death by cohort of birth

Measure	Year of birth prior to survey 1-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
NN	46.9	45.6	63.0	55.1	87.9	72.6	(81.8)
P-NN	56.0	57.0	69.1	79.3	95.0	124.4	(105.8)
1q0	102.9	102.6	132.1	134.4	182.9	197.0	(187.6)
2q0	139.6*	134.5	170.9	177.0	219.3	249.0	(252.6)
5q0	--	178.9	229.6	247.9	283.7	331.4	(362.2)
1q1	40.9*	35.6	44.7	49.2	44.6	64.7	(80.0)
3q2	--	51.3	70.8	86.2	82.4	109.7	(146.7)
4q1	--	85.1	112.3	131.2	123.3	167.3	(214.9)

* Two to four years prior to survey

CAMEROON 1978: A7. Probabilities of infant and child death by calendar years and sex

Measure	Calendar years 1975-9	1970-4	1965-9	1960-4	1955-9	1950-4	1945-9
Males							
NN	49.2	53.2	57.2	58.1	99.2	84.9	(97.9)
P-NN	62.0	51.3	60.5	77.9	88.9	143.8	(92.0)
1q0	111.2	104.5	117.7	136.0	188.1	228.7	(189.9)
2q0	144.3	135.2	163.3	185.0	227.6	(272.0)	(271.0)
5q0	188.3	182.7	234.1	251.3	290.9	(370.0)	(427.5)
1q1	37.3	34.2	51.6	56.7	48.7	(56.2)	(100.1)
3q2	51.4	55.0	84.6	81.3	82.0	(134.6)	(214.7)
4q1	86.7	87.3	131.9	133.4	126.7	(183.2)	(293.3)
Females							
NN	44.2	37.9	56.2	55.1	60.7	65.8	(58.9)
P-NN	52.6	63.8	70.4	73.7	80.4	125.4	(77.7)
1q0	96.8	101.6	126.7	128.8	141.0	191.2	(136.6)
2q0	132.3	135.6	160.7	161.8	181.0	(241.4)	(185.0)
5q0	185.4	182.5	224.4	231.8	251.3	(313.2)	(277.2)
1q1	39.4	37.8	39.0	37.9	46.5	(62.1)	(56.1)
3q2	61.2	54.2	75.9	83.6	85.9	(94.6)	(113.0)
4q1	98.1	90.0	111.9	118.2	128.4	(150.8)	(162.8)
Both sexes							
NN	46.8	45.8	56.7	56.6	80.2	75.0	80.7
P-NN	57.4	57.3	65.3	75.8	84.7	134.2	(85.9)
1q0	104.2	103.1	122.1	132.4	164.9	209.2	(166.7)
2q0	138.5	135.4	162.0	173.2	204.6	256.0	(232.7)
5q0	186.8	182.5	229.3	241.3	271.4	(341.5)	(354.9)
1q1	38.3	36.0	45.5	47.0	47.6	59.2	(79.2)
3q2	56.1	54.6	80.4	82.5	84.0	(114.8)	(159.4)
4q1	92.3	88.6	122.2	125.6	127.6	(167.2)	(225.9)

GHANA 1979: A1. Probabilities of infant and child death by period and sex of child

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Males							
NN	44.6	40.1	53.1	47.2	60.6	(71.4)	(166.7)
P-NN	38.0	39.8	47.2	42.2	61.4	(53.2)	(121.8)
1q0	82.7	80.0	100.3	89.5	122.1	(124.6)	(288.4)
2q0	106.9	103.7	131.8	108.9	(162.7)	(154.0)	(288.4)
5q0	138.8	138.9	175.7	151.0	(217.2)	(211.2)	(353.1)
1q1	26.5	25.7	35.0	21.4	(46.3)	(33.6)	(0.0)
3q2	35.6	39.3	50.5	47.3	(65.1)	(67.6)	(90.9)
4q1	61.2	64.0	83.8	67.6	(108.4)	(98.9)	(90.9)
Females							
NN	31.3	39.5	42.3	47.0	64.9	(96.4)	(172.7)
P-NN	32.5	29.6	34.6	35.0	39.2	(54.8)	(51.1)
1q0	63.8	69.2	76.9	82.0	104.1	(151.2)	(223.8)
2q0	85.2	89.8	103.5	108.6	(133.5)	(165.9)	(259.9)
5q0	115.4	125.0	144.0	154.8	(185.3)	(224.0)	(259.9)
1q1	22.9	22.2	28.8	29.0	(32.8)	(17.2)	(46.5)
3q2	33.0	38.6	45.2	51.9	(59.7)	(69.7)	(0.0)
4q1	55.1	60.0	72.7	79.4	(90.6)	(85.7)	(46.5)
Both sexes							
NN	38.2	39.8	47.7	47.1	62.7	83.3	(169.4)
P-NN	35.4	34.8	40.9	38.8	50.3	(54.0)	(91.3)
1q0	73.5	74.6	88.7	85.9	113.0	(137.3)	(260.8)
2q0	96.4	96.8	117.8	108.8	148.1	(160.0)	(277.2)
5q0	127.4	132.0	160.0	153.0	201.2	(217.6)	(311.6)
1q1	24.7	24.0	31.9	25.0	39.6	(26.3)	(22.2)
3q2	34.3	39.0	47.9	49.5	62.3	(68.7)	(47.6)
4q1	58.1	62.0	78.3	73.3	99.4	(93.1)	(68.8)

GHANA 1979: A3. Children exposed to mortality by period

Age of exposure (months)	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
0- 1	5472	4631	3468	2420	1419	559	121
1- 3	5225	4436	3254	2286	1292	501	92
3- 6	5090	4351	3162	2205	1216	468	78
6-12	4968	4234	3053	2116	1115	409	66
12-24	4885	3944	2897	1938	973	324	45
24-36	4690	3599	2634	1699	783	238	21
36-48	4394	3335	2377	1463	641	170	7
48-60	4161	3073	2168	1252	516	109	3

GHANA 1979: A2. Probabilities of infant and child death by period and age at birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 20 years							
NN	58.2	43.2	47.2	51.5	78.5	(94.1)	(169.4)
P-NN	40.7	33.0	44.1	49.8	(57.0)	(55.7)	(91.3)
1q0	98.8	76.2	91.3	101.3	(135.5)	(149.9)	(260.8)
2q0	120.8	104.1	115.3	120.1	(163.9)	(167.9)	(277.2)
5q0	150.7	158.0	166.8	(163.4)	(218.6)	(229.0)	(311.6)
1q1	24.4	30.2	26.5	20.9	(32.9)	(21.2)	(22.2)
3q2	34.0	60.1	58.2	(49.2)	(65.4)	(73.4)	(47.6)
4q1	57.5	88.6	83.1	(69.2)	(96.1)	(93.1)	(68.8)
20 to 29							
NN	30.5	35.4	43.3	43.2	52.0	(68.2)	—
P-NN	34.3	32.6	44.6	35.5	45.7	(53.4)	—
1q0	64.8	68.0	87.8	78.7	97.7	(121.6)	—
2q0	89.9	88.9	117.5	103.1	137.6	(156.7)	—
5q0	118.5	121.8	158.7	147.3	(188.3)	(297.3)	—
1q1	26.9	22.5	32.5	26.5	44.2	(40.0)	—
3q2	31.4	36.1	46.7	49.3	(58.8)	(166.7)	—
4q1	57.5	57.8	77.7	74.5	(100.4)	(200.0)	—
30 to 39							
NN	35.6	42.7	58.3	(61.4)	—	—	—
P-NN	28.3	36.8	29.8	(33.1)	—	—	—
1q0	63.9	79.5	88.1	(94.5)	—	—	—
2q0	83.6	100.9	120.5	(120.2)	—	—	—
5q0	113.3	129.5	(154.9)	(148.0)	—	—	—
1q1	21.0	23.3	35.6	(28.4)	—	—	—
3q2	32.4	31.8	(39.1)	(31.6)	—	—	—
4q1	52.8	54.3	(73.3)	(59.1)	—	—	—
40 or more							
NN	(57.0)	(60.8)	—	—	—	—	—
P-NN	(59.3)	(63.0)	—	—	—	—	—
1q0	(116.3)	(123.8)	—	—	—	—	—
2q0	(138.4)	(137.1)	—	—	—	—	—
5q0	(204.4)	(148.6)	—	—	—	—	—
1q1	(25.0)	(15.2)	—	—	—	—	—
3q2	(76.7)	(13.3)	—	—	—	—	—
4q1	(99.8)	(28.3)	—	—	—	—	—

GHANA 1979: A4. Probabilities of infant and child death by period and birth order

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
First births							
NN	50.2	49.6	51.5	48.2	66.7	(80.2)	(172.6)
P-NN	34.6	21.0	40.9	41.1	(52.6)	(67.5)	(98.8)
1q0	84.8	70.6	92.4	89.3	(119.4)	(147.7)	(271.5)
2q0	102.8	89.5	122.5	101.4	(144.6)	(161.9)	(291.7)
5q0	138.4	132.5	164.0	(146.2)	(191.3)	(212.9)	(329.0)
1q1	19.7	20.3	33.2	13.3	(28.6)	(16.7)	(27.8)
3q2	39.7	47.2	47.3	(49.8)	(54.6)	(60.8)	(52.6)
4q1	58.6	66.6	78.9	(62.5)	(81.7)	(76.5)	(78.9)
Second and third births							
NN	28.8	20.1	45.3	50.0	59.5	(74.7)	(162.2)
P-NN	34.6	38.2	45.0	35.4	48.3	(32.4)	(77.2)
1q0	63.5	58.3	90.3	85.5	107.8	(107.2)	(239.3)
2q0	86.2	82.1	115.9	112.6	(146.0)	(141.1)	(239.3)
5q0	109.0	117.4	166.2	160.1	(191.5)	(204.9)	—
1q1	24.3	25.2	28.1	29.6	(42.7)	(38.0)	(0.0)
3q2	24.9	38.5	57.0	53.5	(53.2)	(74.2)	—
4q1	48.7	62.7	83.5	81.5	(93.7)	(109.4)	—
Fourth to sixth births							
NN	39.6	43.6	44.4	38.9	(67.4)	(157.9)	—
P-NN	34.3	37.0	38.3	43.9	(54.2)	(81.9)	—
1q0	73.9	80.5	82.6	82.8	(121.6)	(239.7)	—
2q0	101.8	102.3	110.8	(114.9)	(180.9)	(270.2)	—
5q0	130.1	137.1	144.4	(146.7)	(306.0)	(635.1)	—
1q1	30.1	23.7	30.7	(34.9)	(67.5)	(40.0)	—
3q2	31.6	38.8	37.8	(36.0)	(152.7)	(500.0)	—
4q1	60.7	61.6	67.4	(69.7)	(209.9)	(520.0)	—
Seventh or higher order births							
NN	39.0	62.2	(61.7)	(64.1)	(0.0)	—	—
P-NN	39.8	44.4	(32.4)	(27.9)	(0.0)	—	—
1q0	78.8	106.6	(94.1)	(92.0)	(0.0)	—	—
2q0	99.1	(131.6)	(145.4)	(92.0)	(0.0)	—	—
5q0	147.2	(151.0)	(176.4)	(130.9)	—	—	—
1q1	22.0	(28.0)	(56.6)	(0.0)	(0.0)	—	—
3q2	53.4	(22.3)	(36.2)	(42.9)	—	—	—
4q1	74.2	(49.6)	(90.8)	(42.9)	—	—	—

GHANA 1979: A5. Probabilities of infant and child death by period and previous birth interval

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 24 months--ALL intervals							
NN	64.5	52.7	70.5	(64.3)	(70.4)	(101.5)	(192.3)
P-NN	56.8	72.2	66.5	(52.8)	(74.3)	(51.3)	(55.7)
1q0	121.3	124.9	136.9	(117.0)	(144.7)	(152.9)	(248.0)
2q0	161.3	152.3	171.2	(155.4)	(201.7)	(182.6)	(248.0)
5q0	188.2	190.1	(211.9)	(195.4)	(269.2)	(267.9)	—
1q1	45.5	31.3	39.7	(43.4)	(66.7)	(35.1)	(0.0)
3q2	32.1	44.6	(49.1)	(47.5)	(84.5)	(104.4)	—
4q1	76.1	74.5	(86.9)	(88.8)	(145.6)	(135.8)	—
Less than 24 months--SURVIVING intervals only							
NN	53.9	36.2	60.9	(42.6)	(56.9)	(73.5)	(76.9)
P-NN	57.6	57.8	(63.4)	(36.9)	(66.4)	(59.3)	(0.0)
1q0	111.5	94.0	(124.3)	(79.5)	(123.3)	(132.8)	(76.9)
2q0	151.9	122.6	(155.5)	(114.4)	(174.0)	(156.6)	(76.9)
5q0	177.3	(159.7)	(197.9)	(152.0)	(257.0)	(261.7)	—
1q1	45.5	31.6	(35.6)	(37.9)	(57.8)	(27.4)	(0.0)
3q2	29.9	(42.4)	(50.3)	(42.6)	(100.4)	(124.6)	—
4q1	74.1	(72.6)	(84.0)	(78.8)	(152.5)	(148.6)	—
24 to 47							
NN	26.2	32.1	38.1	34.3	(50.2)	(61.6)	(100.0)
P-NN	25.3	29.6	35.0	32.4	(28.4)	(36.8)	(180.0)
1q0	51.5	61.7	73.1	66.8	(78.5)	(98.4)	(280.0)
2q0	73.2	86.6	100.7	89.8	(115.1)	(121.8)	(280.0)
5q0	106.7	122.5	146.2	(140.1)	(165.4)	(168.6)	—
1q1	22.9	26.6	29.8	24.6	(39.8)	(26.0)	(0.0)
3q2	36.1	39.2	50.6	(55.3)	(56.8)	(53.2)	—
4q1	58.1	64.8	78.9	(78.5)	(94.3)	(77.8)	—
48 or more months							
NN	23.5	15.1	(22.4)	(39.6)	(26.8)	(76.9)	—
P-NN	38.0	17.9	(15.0)	(16.5)	(55.1)	(0.0)	—
1q0	61.5	33.0	(37.4)	(56.2)	(82.0)	(76.9)	—
2q0	78.0	46.1	(53.5)	(79.2)	(82.0)	(261.5)	—
5q0	99.3	(55.8)	(83.5)	(104.9)	(150.0)	—	—
1q1	17.6	13.5	(16.7)	(24.4)	(0.0)	(200.0)	—
3q2	23.1	(10.2)	(31.7)	(28.0)	(74.1)	—	—
4q1	40.2	(23.6)	(47.9)	(51.7)	(74.1)	—	—

GHANA 1979: A6. Probabilities of infant and child death by period and whether multiple birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Multiple births							
NN	(76.9)	(161.3)	(181.8)	(191.8)	(192.3)	(375.0)	(0.0)
P-NN	(75.3)	(53.2)	(74.6)	(98.8)	(153.1)	(0.0)	(0.0)
1q0	(152.2)	(214.5)	(256.4)	(290.6)	(345.4)	(375.0)	(0.0)
2q0	(163.1)	(214.5)	(317.4)	(306.0)	(397.1)	(437.5)	—
5q0	(187.9)	(271.0)	(375.3)	(313.7)	(461.7)	(437.5)	—
1q1	(12.9)	(0.0)	(82.1)	(21.7)	(78.9)	(100.0)	—
3q2	(29.6)	(71.9)	(84.8)	(11.1)	(107.1)	(0.0)	—
4q1	(42.1)	(71.9)	(159.9)	(32.6)	(177.6)	(100.0)	—
Single births							
NN	36.8	35.6	44.2	42.6	57.8	74.7	(172.3)
P-NN	33.9	34.1	40.0	37.0	46.4	(55.7)	(93.0)
1q0	70.7	69.8	84.3	79.6	104.2	(130.4)	(265.3)
2q0	94.0	92.6	112.4	102.7	139.0	(151.2)	(281.6)
5q0	125.2	127.3	154.3	148.1	192.1	(210.6)	(315.8)
1q1	25.1	24.5	30.7	25.1	38.8	(23.9)	(22.2)
3q2	34.5	38.2	47.1	50.6	61.7	(70.0)	(47.6)
4q1	58.7	61.8	76.4	74.4	98.1	(92.3)	(68.8)

GHANA 1979: A7. Probabilities of infant and child death by calendar years and sex

Measure	Calendar years 1975-9	1970-4	1965-9	1960-4	1955-9	1950-4	1945-9
Males							
NN	42.5	40.1	50.4	51.9	52.8	(78.5)	(155.8)
P-NN	36.5	39.6	43.7	44.3	60.3	(53.7)	(114.1)
1q0	79.0	79.8	94.1	96.2	113.1	(132.2)	(269.9)
2q0	100.2	104.0	126.2	115.4	150.3	(168.3)	(269.9)
5q0	130.0	137.7	170.9	156.0	(206.4)	(222.8)	(306.4)
1q1	23.0	26.4	35.5	21.2	42.0	(41.6)	(0.0)
3q2	33.1	37.6	51.1	45.9	(66.0)	(65.6)	(50.0)
4q1	55.4	63.0	84.8	66.1	(105.3)	(104.4)	(50.0)
Females							
NN	31.5	39.3	38.6	42.8	74.6	(76.6)	(168.9)
P-NN	30.9	28.7	35.4	35.0	38.4	(51.3)	(59.8)
1q0	62.4	68.0	74.0	77.8	113.1	(127.9)	(228.7)
2q0	84.7	88.3	100.0	109.0	137.7	(147.8)	(257.8)
5q0	111.7	123.0	139.1	152.8	(190.6)	(214.2)	(257.8)
1q1	23.8	21.7	28.1	33.8	27.8	(22.8)	(37.7)
3q2	29.5	38.0	43.4	49.2	(61.3)	(77.9)	(0.0)
4q1	52.5	59.0	70.3	81.3	(87.4)	(98.9)	(37.7)
Both sexes							
NN	37.2	39.7	44.6	47.5	63.4	77.6	(162.3)
P-NN	33.8	34.2	39.6	39.9	49.4	(52.6)	(88.8)
1q0	71.0	73.9	84.1	87.4	112.8	(130.1)	(251.0)
2q0	92.7	96.2	113.3	112.2	143.6	(158.7)	(263.4)
5q0	121.1	130.4	155.2	154.4	198.1	(218.5)	(284.2)
1q1	23.4	24.1	31.8	27.2	34.8	(32.9)	(16.5)
3q2	31.3	37.8	47.3	47.5	63.7	(71.1)	(28.2)
4q1	53.9	61.0	77.6	73.4	96.2	(101.6)	(44.2)

GHANA 1979: A8. Probabilities of infant and child death by cohort of birth

Measure	Year of birth prior to survey 1-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
NN	37.3	39.6	47.4	47.1	60.5	83.0	(170.5)
P-NN	34.7	33.1	40.5	38.9	49.5	53.6	(93.0)
1q0	72.0	72.7	87.9	86.1	110.0	136.7	(263.6)
2q0	91.8*	94.7	115.9	112.3	134.7	171.3	(279.1)
5q0	--	123.3	155.0	151.6	180.1	237.0	(294.6)
1q1	21.4*	23.7	30.7	28.7	27.8	40.1	(21.1)
3q2	--	31.6	44.2	44.3	52.4	79.3	(21.5)
4q1	--	54.5	73.5	71.7	78.8	116.2	(42.1)

* Two to four years prior to survey

IVORY COAST 1980-2: A1. Probabilities of infant and child death by period and sex of child

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Males							
NN	63.8	83.6	97.0	96.2	116.2	(118.3)	(152.9)
P-NN	63.1	77.6	84.8	109.7	111.9	(135.7)	(98.1)
1q0	126.9	161.2	181.8	205.9	228.1	(254.0)	(250.9)
2q0	155.3	196.9	229.0	249.0	(286.5)	(316.0)	(375.8)
5q0	189.1	248.3	271.8	(309.4)	(357.4)	(369.2)	(503.1)
1q1	32.5	42.6	57.6	54.2	(75.6)	(83.1)	(166.7)
3q2	40.0	64.0	55.5	(80.5)	(99.4)	(77.8)	(203.9)
4q1	71.2	103.9	110.0	(130.3)	(167.5)	(154.4)	(336.6)
Females							
NN	43.9	68.5	63.3	67.1	84.1	(97.6)	(217.4)
P-NN	55.1	64.9	82.7	75.0	(109.3)	(88.3)	(69.3)
1q0	99.1	133.4	146.0	142.1	(193.5)	(185.9)	(286.6)
2q0	121.5	167.6	183.8	196.2	(245.7)	(244.5)	(359.2)
5q0	154.6	213.7	233.7	(270.7)	(316.6)	(345.6)	(430.4)
1q1	24.8	39.4	44.3	63.2	(64.8)	(72.0)	(101.7)
3q2	37.7	55.5	61.2	(92.6)	(94.0)	(133.8)	(111.1)
4q1	61.6	92.7	102.8	(149.9)	(152.7)	(196.2)	(201.5)
Both sexes							
NN	54.0	76.1	80.7	82.1	100.6	107.8	(185.5)
P-NN	59.2	71.4	83.7	92.8	110.7	(111.8)	(84.0)
1q0	113.1	147.5	164.5	174.9	211.2	(219.6)	(269.5)
2q0	138.5	182.4	207.1	223.4	266.7	(279.9)	(367.8)
5q0	172.0	231.3	253.4	290.7	(337.6)	(357.6)	(466.2)
1q1	28.6	41.0	51.0	58.7	70.3	(77.3)	(134.5)
3q2	38.8	59.8	58.4	86.6	(96.7)	(107.9)	(155.7)
4q1	66.3	98.3	106.4	140.2	(160.1)	(176.8)	(269.2)

IVORY COAST 1980-2: A3. Children exposed to mortality by period

Age of exposure (months)	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
0- 1	6197	4960	3499	2369	1363	608	159
1- 3	5793	4543	3191	2154	1204	532	122
3- 6	5646	4377	3060	2059	1126	489	106
6-12	5442	4156	2895	1912	1010	431	86
12-24	5173	3779	2657	1678	861	343	60
24-36	4872	3331	2343	1390	692	240	33
36-48	4481	3005	2081	1154	564	168	17
48-60	4088	2740	1848	990	458	115	9

IVORY COAST 1980-2: A2. Probabilities of infant and child death by period and age at birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 20 years							
NN	75.9	98.7	100.5	99.8	(116.0)	(112.6)	(181.5)
P-NN	69.2	77.3	98.5	96.4	(110.2)	(116.4)	(86.6)
1q0	145.1	176.0	199.0	196.1	(226.2)	(229.0)	(268.1)
2q0	175.9	210.8	253.9	(246.4)	(275.1)	(285.0)	(366.5)
5q0	213.3	263.5	(292.7)	(298.2)	(337.0)	(364.4)	(465.2)
1q1	35.9	42.2	68.5	(62.5)	(63.2)	(72.6)	(134.5)
3q2	45.4	66.9	(52.1)	(68.8)	(85.4)	(111.1)	(155.7)
4q1	79.7	106.2	(117.0)	(127.0)	(143.2)	(175.7)	(269.2)
20 to 29							
NN	46.9	65.4	73.8	75.2	91.6	(101.5)	(266.7)
P-NN	54.4	67.9	80.4	94.5	111.1	(105.7)	(0.0)
1q0	101.3	133.3	154.2	169.8	202.8	(207.2)	(266.7)
2q0	128.7	170.6	194.0	213.2	262.4	(276.3)	—
5q0	159.0	222.5	245.6	289.4	(342.8)	(362.0)	—
1q1	30.4	43.0	47.1	52.3	74.9	(87.2)	—
3q2	34.9	62.6	64.0	96.8	(108.9)	(118.3)	—
4q1	64.2	103.0	108.1	144.1	(175.6)	(195.2)	—
30 to 39							
NN	49.2	75.0	75.6	(74.9)	(125.0)	—	—
P-NN	58.0	70.7	75.8	(73.5)	(0.0)	—	—
1q0	107.2	145.8	151.5	(148.4)	(125.0)	—	—
2q0	125.2	176.4	186.1	(229.2)	—	—	—
5q0	155.4	214.2	(224.0)	(268.1)	—	—	—
1q1	20.3	35.8	40.8	(94.9)	—	—	—
3q2	34.5	46.0	(46.5)	(50.5)	—	—	—
4q1	54.0	80.2	(85.4)	(140.6)	—	—	—
40 or more							
NN	(39.2)	(65.5)	(100.0)	—	—	—	—
P-NN	(62.5)	(79.6)	(0.0)	—	—	—	—
1q0	(101.7)	(145.1)	(100.0)	—	—	—	—
2q0	(114.4)	(183.0)	—	—	—	—	—
5q0	(179.4)	(237.1)	—	—	—	—	—
1q1	(14.1)	(44.3)	—	—	—	—	—
3q2	(73.4)	(66.2)	—	—	—	—	—
4q1	(86.5)	(107.5)	—	—	—	—	—

IVORY COAST 1980-2: A4. Probabilities of infant and child death by period and birth order

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
First births							
NN	82.2	100.1	108.9	101.1	(117.4)	(110.1)	(156.9)
P-NN	71.8	77.0	90.0	84.2	(119.8)	(134.1)	(102.8)
1q0	154.0	177.2	198.9	185.3	(237.2)	(244.3)	(259.6)
2q0	183.0	214.4	250.2	(233.9)	(289.9)	(299.0)	(326.2)
5q0	213.5	253.8	(286.8)	(289.9)	(347.7)	(389.6)	(457.1)
1q1	34.3	45.2	64.0	(59.7)	(69.1)	(72.5)	(89.9)
3q2	37.4	50.2	(48.8)	(73.1)	(81.4)	(129.2)	(194.3)
4q1	70.4	93.2	(109.7)	(128.5)	(144.9)	(192.3)	(266.7)
Second and third births							
NN	44.6	62.1	74.2	69.7	95.6	(108.4)	(233.6)
P-NN	52.4	66.5	76.4	95.7	(107.9)	(89.5)	(51.9)
1q0	97.0	128.6	150.6	165.4	(203.5)	(198.0)	(285.6)
2q0	129.4	162.2	194.0	205.1	(254.8)	(264.6)	(489.7)
5q0	162.8	219.1	246.4	(279.1)	(343.6)	(322.4)	(489.7)
1q1	35.9	38.6	51.1	47.6	(64.4)	(83.0)	(285.7)
3q2	38.4	67.9	65.0	(93.1)	(119.1)	(78.6)	(0.0)
4q1	72.9	103.9	112.8	(136.3)	(175.9)	(155.2)	(285.7)
Fourth to sixth births							
NN	44.1	68.3	66.8	76.0	(93.0)	(95.7)	(285.7)
P-NN	53.9	71.9	88.4	(98.8)	(101.5)	(107.5)	(0.0)
1q0	98.0	140.2	155.3	(174.8)	(194.4)	(203.1)	(285.7)
2q0	115.2	173.5	195.3	(231.6)	(259.4)	(265.6)	(285.7)
5q0	147.7	226.7	244.1	(305.1)	(319.0)	(357.4)	—
1q1	19.1	38.8	47.4	(68.8)	(80.6)	(78.4)	(0.0)
3q2	36.8	64.3	60.7	(95.7)	(80.5)	(125.0)	—
4q1	55.2	100.6	105.2	(157.9)	(154.6)	(193.6)	—
Seventh or higher order births							
NN	53.6	85.4	(88.2)	(106.0)	(0.0)	(0.0)	—
P-NN	64.7	72.0	(80.5)	(88.0)	(96.7)	(0.0)	—
1q0	118.3	157.4	(168.7)	(194.0)	(96.7)	(0.0)	—
2q0	140.0	195.7	(195.1)	(274.6)	(221.3)	(0.0)	—
5q0	178.8	(229.4)	(227.7)	(319.9)	(221.3)	—	—
1q1	24.6	45.5	(31.7)	(100.0)	(137.9)	(0.0)	—
3q2	45.2	(41.9)	(40.5)	(62.4)	(0.0)	—	—
4q1	68.6	(85.5)	(71.0)	(156.2)	(137.9)	—	—

IVORY COAST 1980-2: A5. Probabilities of infant and child death by period and previous birth interval

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 24 months—ALL intervals							
NN	59.2	84.3	74.9	81.9	(128.9)	(119.4)	(387.8)
P-NN	69.6	87.2	90.1	(123.8)	(99.2)	(112.9)	(42.2)
1q0	128.8	171.5	165.0	(205.8)	(228.1)	(232.3)	(430.0)
2q0	155.5	205.4	203.3	(254.8)	(290.3)	(331.9)	(667.5)
5q0	200.5	261.1	(252.3)	(339.4)	(347.2)	(346.4)	(667.5)
1q1	30.6	41.0	45.9	(61.8)	(80.6)	(129.8)	(416.7)
3q2	53.3	70.0	(61.4)	(113.5)	(80.2)	(21.7)	(0.0)
4q1	82.3	108.1	(104.5)	(168.3)	(154.3)	(148.7)	(416.7)
Less than 24 months—SURVIVING intervals only							
NN	40.3	58.3	57.9	(66.8)	(75.6)	(44.6)	(357.1)
P-NN	55.1	71.1	(70.9)	(101.2)	(80.9)	(83.4)	(0.0)
1q0	95.4	129.4	(128.9)	(168.0)	(156.4)	(128.0)	(357.1)
2q0	125.6	161.1	(167.4)	(207.5)	(217.8)	(255.4)	(500.0)
5q0	172.5	(218.1)	(218.9)	(284.1)	(279.9)	(279.4)	(500.0)
1q1	33.4	36.4	(44.2)	(47.5)	(72.8)	(146.1)	(222.2)
3q2	53.6	(68.0)	(61.8)	(96.7)	(79.3)	(32.3)	(0.0)
4q1	85.2	(101.9)	(103.3)	(139.6)	(146.3)	(173.6)	(222.2)
24 to 47 months							
NN	41.2	62.5	67.7	65.5	(63.3)	(90.1)	(67.8)
P-NN	51.7	62.5	79.9	82.5	(113.9)	(79.3)	(58.3)
1q0	92.9	124.9	147.6	148.1	(177.2)	(169.4)	(126.1)
2q0	118.7	163.4	189.8	198.0	(234.2)	(215.1)	(271.7)
5q0	151.3	217.5	241.5	(268.3)	(332.2)	(305.6)	(271.7)
1q1	28.5	43.9	49.5	58.6	(69.2)	(55.0)	(166.7)
3q2	37.0	64.8	63.8	(87.7)	(128.0)	(115.3)	(0.0)
4q1	64.4	105.8	110.1	(141.1)	(188.4)	(164.0)	(166.7)
48 or more months							
NN	23.7	(28.2)	(51.3)	(39.2)	(63.0)	(0.0)	—
P-NN	(31.8)	(53.0)	(48.2)	(76.3)	(88.2)	(69.0)	—
1q0	(55.5)	(81.2)	(99.6)	(115.5)	(151.2)	(69.0)	—
2q0	(64.5)	(96.2)	(123.5)	(144.4)	(175.4)	(69.0)	—
5q0	(82.5)	(123.9)	(163.2)	(192.1)	(221.2)	(69.0)	—
1q1	(9.6)	(16.3)	(26.6)	(32.7)	(28.6)	(0.0)	—
3q2	(19.2)	(30.6)	(45.3)	(55.7)	(55.6)	(0.0)	—
4q1	(28.6)	(46.4)	(70.6)	(86.6)	(82.5)	(0.0)	—

IVORY COAST 1980-2: A6. Probabilities of infant and child death by period and whether multiple birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Multiple births							
NN	(194.4)	(276.0)	(362.2)	(306.7)	(392.9)	(571.4)	(600.0)
P-NN	(166.0)	(111.8)	(195.6)	(147.0)	(140.1)	(85.7)	--
1q0	(360.4)	(387.8)	(557.8)	(453.7)	(533.0)	(657.1)	--
2q0	(401.2)	(406.1)	(600.6)	(539.9)	(557.5)	(657.1)	--
5q0	(414.0)	(443.2)	(620.6)	(606.8)	(640.5)	(657.1)	--
1q1	(63.7)	(29.9)	(96.8)	(157.9)	(52.6)	(0.0)	--
3q2	(21.4)	(62.4)	(50.0)	(145.3)	(187.5)	(0.0)	--
4q1	(83.8)	(90.5)	(141.9)	(280.3)	(230.3)	(0.0)	--
Single births							
NN	48.9	68.5	72.6	74.8	94.4	102.4	(172.1)
P-NN	55.3	69.8	80.2	91.2	110.1	(111.7)	(85.7)
1q0	104.2	138.3	152.9	166.0	204.6	(214.2)	(257.8)
2q0	129.1	173.9	195.4	213.5	260.6	(275.4)	(357.6)
5q0	163.3	223.2	242.4	281.0	(331.2)	(354.1)	(457.6)
1q1	27.7	41.3	50.2	57.0	70.5	(77.9)	(134.5)
3q2	39.3	59.7	58.4	85.8	(95.4)	(108.6)	(155.7)
4q1	65.9	98.5	105.7	137.9	(159.2)	(178.0)	(269.2)

IVORY COAST 1980-2: A7. Probabilities of infant and child death by calendar years and sex of child

Measure	Calendar years 1975-9	1970-4	1965-9	1960-4	1955-9	1950-4	1945-9
Males							
NN	69.2	85.7	98.7	98.2	117.4	(110.7)	(166.7)
P-NN	61.7	82.6	80.9	117.8	(117.4)	(143.4)	(120.4)
1q0	130.8	168.3	179.6	216.0	(234.7)	(254.1)	(287.0)
2q0	158.2	205.4	220.8	265.9	(287.8)	(317.9)	(321.0)
5q0	191.6	259.7	268.7	(312.9)	(361.2)	(352.3)	(321.0)
1q1	31.5	44.5	50.3	63.6	(69.4)	(85.6)	(47.6)
3q2	39.7	68.3	61.4	(64.0)	(103.0)	(50.4)	(0.0)
4q1	69.9	109.8	108.6	(123.6)	(165.2)	(131.7)	(47.6)
Females							
NN	50.3	74.2	61.6	60.5	89.0	(118.3)	(250.0)
P-NN	56.8	66.8	81.2	82.1	(109.1)	(88.2)	(45.4)
1q0	107.1	141.0	142.9	142.6	(198.1)	(206.6)	(295.4)
2q0	128.9	177.6	185.0	207.0	(244.1)	(251.9)	(396.1)
5q0	160.9	226.5	239.4	(259.3)	(330.1)	(315.4)	(489.0)
1q1	24.4	42.6	49.2	75.1	(57.4)	(57.1)	(142.9)
3q2	36.7	59.5	66.6	(65.9)	(113.7)	(84.9)	(153.8)
4q1	60.3	99.5	112.6	(136.1)	(164.5)	(137.2)	(274.7)
Both sexes							
NN	59.7	80.1	80.7	80.0	103.6	(114.6)	(205.9)
P-NN	59.2	74.9	81.1	100.6	113.3	(114.7)	(82.6)
1q0	118.9	155.0	161.8	180.5	216.9	(229.3)	(288.5)
2q0	143.5	191.8	203.5	237.5	266.5	(283.7)	(361.1)
5q0	176.2	243.4	254.5	287.0	(346.4)	(332.7)	(412.2)
1q1	27.9	43.6	49.7	69.5	63.3	(70.5)	(102.0)
3q2	38.2	63.8	64.1	64.9	(108.9)	(68.4)	(80.0)
4q1	65.0	104.6	110.7	129.9	(165.4)	(134.1)	(173.9)

IVORY COAST 1980-2: A8. Probabilities of infant and child death by cohort of birth

Measure	Year of birth prior to survey 1-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
NN	55.1	75.6	79.7	82.4	98.7	106.7	(189.0)
P-NN	58.4	67.6	84.6	92.8	103.0	122.6	(85.4)
1q0	113.6	143.2	164.3	175.1	201.7	229.3	(274.4)
2q0	141.0*	174.8	206.6	217.1	257.6	277.1	(365.9)
5q0	--	211.2	254.3	272.5	315.7	359.9	(432.9)
1q1	31.0*	36.9	50.6	50.9	70.0	62.0	(126.1)
3q2	--	44.1	60.1	70.7	78.2	114.5	(105.8)
4q1	--	79.4	107.7	118.0	142.7	169.4	(218.5)

* Two to four years prior to survey

NIGERIA 1981-2: A1. Probabilities of infant and child death by period and sex of child

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Males							
NN	51.4	51.2	60.3	56.7	67.1	(134.8)	(125.9)
P-NN	47.6	47.2	56.5	62.4	46.4	(80.4)	(119.1)
1q0	99.0	98.4	116.8	119.2	113.5	(215.2)	(245.0)
2q0	130.4	127.8	159.1	160.8	177.2	(234.9)	(287.0)
5q0	170.1	169.0	216.1	230.6	(224.5)	(260.4)	(303.5)
1q1	34.8	32.5	47.9	47.3	71.8	(25.0)	(55.7)
3q2	45.7	47.2	67.8	83.1	(57.5)	(33.4)	(23.1)
4q1	78.9	78.2	112.4	126.5	(125.2)	(57.6)	(77.5)
Females							
NN	41.2	42.4	52.5	50.8	57.7	(83.1)	(87.3)
P-NN	39.6	39.2	48.7	46.0	57.6	(63.7)	(24.2)
1q0	80.7	81.5	101.2	96.9	115.3	(146.8)	(111.4)
2q0	117.0	114.1	137.8	124.9	152.6	(183.1)	(191.9)
5q0	162.2	150.8	192.3	185.6	(215.2)	(262.7)	(191.9)
1q1	39.5	35.5	40.7	31.0	42.2	(42.6)	(90.5)
3q2	51.1	41.3	63.3	69.4	(73.9)	(97.5)	(0.0)
4q1	88.6	75.4	101.4	98.3	(112.9)	(135.9)	(90.5)
Both sexes							
NN	46.4	47.2	56.7	53.9	62.8	113.5	(112.7)
P-NN	43.7	43.6	52.9	54.8	51.5	73.2	(88.5)
1q0	90.0	90.8	109.6	108.7	114.3	186.7	(201.2)
2q0	123.8	121.6	149.2	144.0	165.7	(213.3)	(255.9)
5q0	166.1	160.7	204.9	209.6	219.4	(260.4)	(267.2)
1q1	37.1	33.9	44.5	39.6	58.1	(32.7)	(68.5)
3q2	48.3	44.5	65.6	76.6	64.4	(60.0)	(15.3)
4q1	83.6	76.9	107.1	113.2	118.7	(90.7)	(82.7)

NIGERIA 1981-2: A3. Children exposed to mortality by period

Age of exposure (months)	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
0- 1	9508	8478	5593	3604	1841	705	200
1- 3	9036	8051	5176	3391	1659	610	168
3- 6	8931	7840	4955	3274	1539	564	145
6-12	8882	7595	4719	3138	1341	511	102
12-24	8841	6945	4403	2780	1114	422	57
24-36	8520	6015	3923	2330	881	316	32
36-48	8020	5313	3516	1909	730	223	17
48-60	7448	4784	3138	1573	605	164	6

NIGERIA 1981-2: A2. Probabilities of infant and child death by period and age at birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 20 years							
NN	57.6	58.9	70.1	55.0	64.2	(165.2)	(112.7)
P-NN	42.9	59.7	48.3	51.5	59.2	(77.9)	(88.5)
1q0	100.5	118.6	118.4	106.5	123.4	(243.1)	(201.2)
2q0	130.9	155.7	154.2	145.4	175.0	(269.4)	(255.9)
5q0	168.4	192.6	200.7	212.7	(244.9)	(316.2)	(267.2)
1q1	33.9	42.1	40.5	43.6	58.9	(34.7)	(68.5)
3q2	43.2	43.6	55.0	78.7	(84.8)	(64.1)	(15.3)
4q1	75.6	83.9	93.3	118.9	(138.7)	(96.6)	(82.7)
20 to 29							
NN	39.8	37.9	47.9	57.8	61.6	(32.5)	—
P-NN	39.2	29.8	59.1	55.8	44.0	(63.7)	—
1q0	79.1	67.7	106.9	113.6	105.6	(96.2)	—
2q0	112.4	93.9	149.3	147.8	156.8	(121.2)	—
5q0	150.4	139.5	202.4	213.3	(194.1)	(147.1)	—
1q1	36.2	28.1	47.4	38.6	57.2	(27.7)	—
3q2	42.8	50.3	62.4	76.9	(44.2)	(29.4)	—
4q1	77.5	77.0	106.9	112.6	(98.9)	(56.3)	—
30 to 39							
NN	43.7	54.0	52.3	(25.3)	—	—	—
P-NN	52.9	56.6	43.9	(67.2)	—	—	—
1q0	96.5	110.6	96.2	(92.4)	—	—	—
2q0	133.7	144.4	136.0	(110.0)	—	—	—
5q0	179.5	168.9	(235.6)	(131.5)	—	—	—
1q1	41.2	38.0	44.1	(19.4)	—	—	—
3q2	52.8	28.6	(115.3)	(24.1)	—	—	—
4q1	91.8	65.5	(154.2)	(43.1)	—	—	—
40 or more							
NN	(98.9)	(72.4)	—	—	—	—	—
P-NN	(59.8)	(64.6)	—	—	—	—	—
1q0	(158.7)	(137.0)	—	—	—	—	—
2q0	(199.5)	(151.8)	—	—	—	—	—
5q0	(342.9)	(189.4)	—	—	—	—	—
1q1	(48.5)	(17.2)	—	—	—	—	—
3q2	(179.2)	(44.3)	—	—	—	—	—
4q1	(219.0)	(60.7)	—	—	—	—	—

NIGERIA 1981-2: A4. Probabilities of infant and child death by period and birth order

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
First births							
NN	46.2	57.1	55.2	51.1	61.7	(98.4)	(89.5)
P-NN	32.7	43.1	46.9	33.8	29.3	(74.0)	(57.3)
1q0	78.8	100.2	102.0	84.9	91.0	(172.3)	(146.8)
2q0	101.7	127.2	139.2	109.6	(138.3)	(193.2)	(186.9)
5q0	132.5	156.3	183.1	154.0	(195.8)	(237.0)	(203.6)
1q1	24.8	30.0	41.4	27.0	(52.0)	(25.2)	(46.9)
3q2	34.3	33.3	51.0	49.9	(66.8)	(54.3)	(20.6)
4q1	58.2	62.3	90.3	75.5	(115.3)	(78.2)	(66.5)
Second and third births							
NN	47.7	39.1	52.5	54.4	49.9	(146.0)	(194.0)
P-NN	36.5	36.8	38.5	60.5	75.8	(71.3)	(140.4)
1q0	84.2	76.0	91.0	114.9	125.7	(217.4)	(334.4)
2q0	117.5	101.6	128.3	150.1	(173.7)	(255.8)	(370.7)
5q0	156.6	143.0	179.3	231.8	(223.7)	(330.5)	(370.7)
1q1	36.4	27.7	41.0	39.8	(54.9)	(49.1)	(54.4)
3q2	44.3	46.1	58.5	96.1	(60.5)	(100.4)	(0.0)
4q1	79.1	72.6	97.2	132.1	(112.1)	(144.5)	(54.4)
Fourth to sixth births							
NN	40.6	48.2	62.0	55.5	(98.6)	(66.8)	(0.0)
P-NN	48.8	33.7	72.2	59.1	(52.5)	(81.4)	(376.8)
1q0	89.3	81.9	134.1	114.6	(151.1)	(148.2)	(376.8)
2q0	127.6	123.5	176.6	163.7	(226.0)	(164.9)	(0.0)
5q0	177.0	169.3	252.1	(240.8)	(286.6)	(164.9)	(0.0)
1q1	42.0	45.4	49.0	55.4	(88.2)	(19.5)	(0.0)
3q2	56.7	52.2	91.8	(92.2)	(78.3)	(0.0)	—
4q1	96.3	95.2	136.2	(142.5)	(159.7)	(19.5)	(0.0)
Seventh or higher order births							
NN	56.5	52.9	(65.6)	(58.4)	(40.4)	(0.0)	—
P-NN	59.5	93.4	(80.7)	(114.0)	(23.5)	(0.0)	—
1q0	116.0	146.3	(146.3)	(172.5)	(63.9)	(0.0)	—
2q0	153.5	176.9	(197.9)	(226.1)	(86.1)	(0.0)	—
5q0	204.3	(216.2)	(263.9)	(280.4)	(86.1)	(0.0)	—
1q1	42.4	35.8	(60.5)	(64.8)	(23.8)	(0.0)	—
3q2	60.1	(47.8)	(82.2)	(70.2)	(0.0)	(0.0)	—
4q1	99.9	(81.9)	(137.7)	(130.4)	(23.8)	(0.0)	—

NIGERIA 1981-2: A5. Probabilities of infant and child death by period and previous birth interval

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 24 months—ALL intervals							
NN	61.7	55.0	71.5	50.9	(105.8)	(212.2)	(168.9)
P-NN	62.9	50.6	71.3	77.5	(89.2)	(71.7)	(171.3)
1q0	124.5	105.7	142.8	128.3	(194.9)	(283.9)	(340.2)
2q0	165.3	145.8	186.4	167.7	(272.2)	(322.1)	(487.1)
5q0	217.9	197.8	245.0	(245.7)	(309.7)	(374.5)	(487.1)
1q1	46.5	44.9	50.8	45.2	(96.0)	(53.4)	(222.5)
3q2	63.0	60.9	72.1	(93.7)	(51.5)	(77.2)	(0.0)
4q1	106.6	103.1	119.2	(134.6)	(142.6)	(126.5)	(222.5)
Less than 24 months—SURVIVING intervals only							
NN	47.5	34.7	38.8	36.3	(61.6)	(39.8)	(110.2)
P-NN	50.0	38.7	40.3	48.1	(63.6)	(62.5)	(132.6)
1q0	97.6	73.3	79.1	84.3	(125.1)	(102.3)	(242.8)
2q0	131.6	101.2	115.9	112.0	(197.3)	(130.9)	(242.8)
5q0	174.6	152.1	172.2	(199.9)	(247.9)	(166.3)	—
1q1	37.7	30.1	39.9	30.2	(82.5)	(31.8)	(0.0)
3q2	49.5	56.7	63.7	(99.0)	(63.1)	(40.7)	—
4q1	85.4	85.1	101.1	(126.2)	(140.4)	(71.3)	—
24 to 47 months							
NN	34.2	34.6	47.6	60.6	36.4	(46.7)	(197.4)
P-NN	37.1	43.5	50.9	47.2	(57.1)	(74.6)	(167.8)
1q0	71.3	78.1	98.5	107.8	(93.4)	(121.3)	(365.2)
2q0	107.1	109.1	136.9	150.0	(130.6)	(151.6)	(365.2)
5q0	141.7	149.1	205.7	(234.6)	(198.0)	(206.4)	—
1q1	38.5	33.6	42.6	47.3	(41.0)	(34.5)	(0.0)
3q2	38.7	44.9	79.7	(99.6)	(77.5)	(64.5)	—
4q1	75.8	77.0	118.9	(142.2)	(115.3)	(96.8)	—
48 or more months							
NN	22.3	30.7	23.6	(27.8)	(16.8)	(64.5)	(0.0)
P-NN	23.4	15.9	(18.4)	(52.0)	(7.1)	(69.9)	—
1q0	45.7	46.7	(42.0)	(79.7)	(23.9)	(134.3)	—
2q0	63.8	60.6	(60.9)	(103.3)	(46.9)	(134.3)	—
5q0	119.0	85.1	(98.2)	(117.7)	(76.1)	(345.4)	—
1q1	18.9	14.6	(19.7)	(25.6)	(23.6)	(0.0)	—
3q2	59.0	26.1	(39.8)	(16.1)	(30.6)	(243.9)	—
4q1	76.8	40.3	(58.7)	(41.3)	(53.5)	(243.9)	—

NIGERIA 1981-2: A6. Probabilities of infant and child death by period and whether multiple birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Multiple births							
NN	(164.4)	(139.7)	(210.4)	(130.2)	(92.3)	(239.2)	(0.0)
P-NN	(67.5)	(89.5)	(87.8)	(143.9)	(128.9)	(67.6)	(74.7)
1q0	(231.9)	(229.1)	(298.2)	(274.0)	(221.3)	(306.8)	(74.7)
2q0	(287.9)	(250.8)	(383.1)	(360.8)	(359.8)	(400.0)	(74.7)
5q0	(362.0)	(301.3)	(434.2)	(495.3)	(359.8)	(510.4)	—
1q1	(73.0)	(28.1)	(121.0)	(119.4)	(177.9)	(134.4)	(0.0)
3q2	(103.9)	(67.4)	(82.8)	(210.5)	(0.0)	(183.9)	—
4q1	(169.4)	(93.6)	(193.8)	(304.8)	(177.9)	(293.6)	—
Single births							
NN	42.1	44.2	52.6	51.5	62.0	111.8	(114.7)
P-NN	42.8	42.1	51.9	51.8	49.4	73.3	(88.7)
1q0	84.9	86.3	104.6	103.2	111.4	185.1	(203.4)
2q0	117.8	117.4	142.9	136.8	161.0	(210.8)	(259.1)
5q0	158.9	156.3	198.8	199.6	215.6	(256.7)	(270.7)
1q1	36.0	34.0	42.8	37.4	55.8	(31.6)	(69.9)
3q2	46.6	44.0	65.2	72.8	65.1	(58.2)	(15.6)
4q1	80.9	76.6	105.2	107.5	117.3	(87.9)	(84.4)

NIGERIA 1981-2: A7. Probabilities of infant and child death by calendar years and sex of child

Measure	Calendar years 1975-9	1970-4	1965-9	1960-4	1955-9	1950-4	1945-9
Males							
NN	47.7	58.2	65.3	52.0	97.3	(152.7)	(139.2)
P-NN	46.5	52.8	61.0	60.7	(62.1)	(51.0)	(97.9)
1q0	94.2	111.0	126.3	112.7	(159.4)	(203.6)	(237.1)
2q0	120.8	145.2	172.7	156.9	(187.6)	(234.2)	(237.1)
5q0	154.6	191.1	237.8	(217.5)	(227.0)	(239.0)	—
1q1	29.3	38.5	53.1	49.8	(33.6)	(38.4)	(0.0)
3q2	38.5	53.7	78.6	(71.9)	(48.5)	(6.2)	—
4q1	66.7	90.1	127.6	(118.1)	(80.4)	(44.4)	—
Females							
NN	37.4	46.2	57.3	48.1	70.7	(97.0)	(181.2)
P-NN	35.6	45.5	47.3	58.0	(56.9)	(63.0)	(25.7)
1q0	73.0	91.7	104.6	106.1	(127.6)	(160.0)	(206.9)
2q0	102.3	133.2	129.9	127.6	(153.2)	(192.5)	(206.9)
5q0	135.1	183.3	190.9	(175.0)	(242.8)	(277.6)	—
1q1	31.6	45.6	28.3	24.1	(29.3)	(38.7)	(0.0)
3q2	36.5	57.8	70.1	(54.3)	(105.8)	(105.5)	—
4q1	67.0	100.8	96.4	(77.1)	(132.0)	(140.1)	—
Both sexes							
NN	42.8	52.8	61.6	50.2	85.2	(130.1)	(152.6)
P-NN	41.4	49.5	54.2	59.4	59.8	(55.4)	(70.6)
1q0	84.2	102.2	115.8	109.6	145.0	(185.5)	(223.2)
2q0	112.0	139.8	152.0	143.2	172.2	(216.9)	(223.2)
5q0	145.3	187.6	215.2	198.2	(232.6)	(250.9)	—
1q1	30.4	41.8	41.0	37.7	31.8	(38.5)	(0.0)
3q2	37.5	55.6	74.5	64.2	(73.0)	(43.5)	—
4q1	66.8	95.0	112.4	99.4	(102.5)	(80.3)	—

NIGERIA 1981-2: A8. Probabilities of infant and child death by cohort of birth

Measure	Year of birth prior to survey 1-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
NN	44.4	45.6	53.5	52.4	55.2	96.2	(96.8)
P-NN	44.1	40.9	47.8	50.4	48.9	61.5	(102.8)
1q0	88.5	86.5	101.2	102.8	104.1	157.7	(199.6)
2q0	116.6*	117.5	136.6	138.9	146.1	194.8	(234.1)
5q0	--	151.6	176.2	191.1	208.3	243.2	(281.1)
1q1	30.8*	33.8	39.3	40.1	46.8	44.1	(43.1)
3q2	--	38.7	45.9	60.6	72.8	60.1	(61.3)
4q1	--	71.3	83.4	98.3	116.2	101.6	(101.8)

* Two to four years prior to survey

EGYPT 1980: A1. Probabilities of infant and child death by period and sex of child

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Males							
NN	61.6	77.1	70.3	77.2	72.8	88.9	(91.4)
P-NN	68.9	72.8	71.2	80.2	91.3	123.1	(93.8)
1q0	130.6	149.9	141.6	157.3	164.1	212.0	(185.2)
2q0	157.7	193.4	194.1	220.4	235.2	(308.9)	(302.3)
5q0	185.0	230.2	236.4	275.9	309.7	(380.3)	(407.0)
1q1	31.2	51.1	61.2	74.8	85.0	(123.0)	(143.7)
3q2	32.4	45.7	52.5	71.2	97.4	(103.3)	(150.0)
4q1	62.6	94.5	110.5	140.7	174.2	(213.6)	(272.2)
Females							
NN	55.5	56.4	52.2	48.8	62.7	38.6	(37.7)
P-NN	78.7	84.7	87.7	95.7	105.0	129.6	(146.4)
1q0	134.2	141.1	139.9	144.5	167.7	168.2	(184.0)
2q0	171.8	203.5	194.0	216.2	246.4	(264.8)	(307.1)
5q0	196.6	246.6	250.7	289.4	341.6	(336.0)	(410.2)
1q1	43.4	72.6	62.9	83.8	94.5	(116.2)	(150.8)
3q2	29.9	54.2	70.4	93.5	126.3	(96.8)	(148.8)
4q1	72.0	122.8	128.9	169.4	208.9	(201.7)	(277.2)
Both sexes							
NN	58.7	67.1	61.6	63.6	67.8	64.6	(66.3)
P-NN	73.7	78.5	79.2	87.6	98.2	126.2	(117.7)
1q0	132.3	145.6	140.8	151.2	165.9	190.8	(184.0)
2q0	164.5	198.1	194.1	218.4	240.8	287.6	(303.8)
5q0	190.6	238.0	243.4	282.6	325.7	(358.9)	(408.4)
1q1	37.1	61.5	62.0	79.2	89.8	119.6	(146.9)
3q2	31.2	49.7	61.2	82.1	111.8	(100.1)	(150.2)
4q1	67.1	108.1	119.4	154.8	191.6	(207.8)	(275.0)

EGYPT 1980: A3. Children exposed to mortality by period

Age of exposure (months)	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
0- 1	9396	7931	7373	5757	3550	1712	370
1- 3	8764	7352	6891	5343	3263	1561	326
3- 6	8528	7173	6713	5133	3129	1435	285
6-12	8286	6925	6464	4871	2916	1233	223
12-24	7937	6435	6095	4319	2484	962	143
24-36	7368	6023	5457	3569	1963	646	70
36-48	6795	5907	4938	3029	1570	425	31
48-60	6372	5719	4500	2630	1259	285	13

EGYPT 1980: A2. Probabilities of infant and child death by period and age at birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 20 years							
NN	81.6	66.2	74.2	81.0	82.0	74.3	(66.3)
P-NN	101.8	104.0	92.0	105.0	109.5	124.3	(117.7)
1q0	183.4	170.2	166.1	186.0	191.5	198.6	(184.0)
2q0	220.3	230.0	225.2	263.7	283.0	300.6	(303.8)
5q0	242.6	266.1	274.7	329.2	368.8	(370.3)	(408.4)
1q1	45.2	72.1	70.8	95.5	113.2	127.3	(146.9)
3q2	28.7	46.8	63.9	89.0	119.7	(99.7)	(150.2)
4q1	72.5	115.5	130.1	176.0	219.3	(214.3)	(275.0)
20 to 29							
NN	55.5	67.3	58.8	55.7	59.0	46.6	—
P-NN	68.8	75.3	76.5	83.7	90.6	(132.5)	—
1q0	124.3	142.6	135.3	139.4	149.6	(179.1)	—
2q0	156.5	192.9	189.4	203.4	212.0	(253.7)	—
5q0	182.1	230.7	240.9	265.7	293.6	(318.9)	—
1q1	36.8	58.7	62.6	74.4	73.5	(90.9)	—
3q2	30.3	46.8	63.5	78.1	103.5	(87.3)	—
4q1	66.0	102.8	122.1	146.7	169.4	(170.2)	—
30 to 39							
NN	50.2	65.5	56.6	(68.9)	—	—	—
P-NN	66.0	65.2	73.2	(53.9)	—	—	—
1q0	116.2	130.7	129.7	(122.8)	—	—	—
2q0	146.8	183.5	172.8	(166.2)	—	—	—
5q0	175.7	231.9	(212.1)	(225.0)	—	—	—
1q1	34.6	60.8	49.4	(49.5)	—	—	—
3q2	33.8	59.3	(47.6)	(70.6)	—	—	—
4q1	67.3	116.4	(94.7)	(116.6)	—	—	—
40 or more							
NN	(76.0)	(101.4)	—	—	—	—	—
P-NN	(81.6)	(123.4)	—	—	—	—	—
1q0	(157.6)	(224.8)	—	—	—	—	—
2q0	(172.4)	(256.3)	—	—	—	—	—
5q0	(205.3)	(300.0)	—	—	—	—	—
1q1	(17.6)	(40.5)	—	—	—	—	—
3q2	(39.7)	(58.8)	—	—	—	—	—
4q1	(56.6)	(97.0)	—	—	—	—	—

EGYPT 1980: A4. Probabilities of infant and child death by period and birth order

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
First births							
NN	60.8	69.8	61.9	55.3	68.2	64.6	(78.9)
P-NN	66.9	74.6	78.7	90.1	95.2	130.3	(99.4)
1q0	127.6	144.3	140.6	145.4	163.4	194.9	(178.3)
2q0	152.4	191.2	184.0	214.3	231.8	(282.8)	(284.5)
5q0	166.6	211.9	219.4	263.6	(307.9)	(352.2)	(387.2)
1q1	28.4	54.8	50.6	80.6	81.8	(109.3)	(129.2)
3q2	16.8	25.6	43.4	62.8	(99.1)	(96.7)	(143.6)
4q1	44.7	79.0	91.7	138.3	(172.8)	(195.4)	(254.2)
Second and third births							
NN	50.0	50.2	51.3	61.0	58.4	53.9	(44.2)
P-NN	72.7	83.8	73.9	86.2	98.8	103.8	(153.5)
1q0	122.8	133.9	125.1	147.1	157.2	157.8	(197.8)
2q0	158.5	184.8	184.1	211.4	238.7	(262.2)	(360.4)
5q0	186.6	223.1	235.5	279.5	331.5	(330.8)	(460.1)
1q1	40.7	58.7	67.4	75.4	96.7	(124.0)	(202.7)
3q2	33.4	47.0	63.1	86.4	121.9	(92.9)	(155.8)
4q1	72.8	102.9	126.2	155.2	206.8	(205.4)	(327.0)
Fourth to sixth births							
NN	56.7	73.2	66.2	64.0	73.2	(93.5)	(0.0)
P-NN	69.1	76.5	77.4	85.5	97.1	(187.5)	(187.5)
1q0	125.7	149.7	143.6	149.5	170.3	(281.0)	(187.5)
2q0	159.4	202.6	201.7	222.7	236.4	(384.4)	(187.5)
5q0	190.0	251.2	256.0	294.9	(316.9)	(553.7)	(0.0)
1q1	38.6	62.2	67.9	86.1	79.7	(143.8)	(0.0)
3q2	36.3	60.9	68.0	92.9	(105.5)	(275.0)	(0.0)
4q1	73.5	119.4	131.3	171.0	(176.8)	(379.2)	(0.0)
Seventh or higher order births							
NN	75.2	81.3	72.6	87.5	(132.4)	(146.3)	—
P-NN	90.1	77.4	94.4	(95.3)	(122.2)	(306.0)	—
1q0	165.3	158.8	167.1	(182.8)	(254.5)	(452.4)	—
2q0	196.8	219.0	210.5	(234.7)	(366.1)	(616.7)	—
5q0	224.2	264.1	(263.0)	(299.6)	(432.4)	—	—
1q1	37.8	71.6	52.1	(63.5)	(149.6)	(300.0)	—
3q2	34.0	57.8	(66.5)	(84.9)	(104.7)	—	—
4q1	70.5	125.3	(115.2)	(142.9)	(238.6)	—	—

EGYPT 1980: A5. Probabilities of infant and child death by period and previous birth interval

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 24 months—ALL intervals							
NN	83.2	103.7	92.8	95.3	95.0	76.5	(33.9)
P-NN	110.7	109.8	105.9	106.1	124.1	(140.2)	(176.4)
1q0	193.9	213.5	198.7	201.4	219.1	(216.7)	(210.3)
2q0	243.1	282.4	269.7	285.5	303.0	(345.2)	(411.3)
5q0	281.1	333.4	331.3	359.2	(396.4)	(422.0)	(536.4)
1q1	61.1	87.6	88.6	105.3	107.4	(164.0)	(254.5)
3q2	50.2	71.1	84.3	103.1	(134.0)	(117.3)	(212.5)
4q1	108.3	152.4	165.5	197.6	(227.0)	(262.1)	(413.0)
Less than 24 months—SURVIVING intervals only							
NN	68.1	85.1	70.0	61.9	61.2	(57.0)	(35.1)
P-NN	99.1	95.1	95.8	94.2	108.6	(116.8)	(124.3)
1q0	167.3	180.2	165.8	156.1	169.9	(173.8)	(159.4)
2q0	220.2	242.5	233.6	232.5	254.8	(289.2)	(335.4)
5q0	263.3	300.2	303.0	320.4	(364.2)	(369.1)	(450.7)
1q1	63.6	76.1	81.2	90.6	102.3	(139.7)	(209.3)
3q2	55.2	76.2	90.7	114.5	(146.8)	(112.4)	(173.6)
4q1	115.3	146.5	164.5	194.7	(234.1)	(236.4)	(346.6)
24 to 47 months							
NN	38.6	40.3	31.9	31.2	28.2	(36.4)	(31.3)
P-NN	53.9	61.5	49.4	65.4	63.8	(83.3)	(89.2)
1q0	92.6	101.8	81.3	96.7	92.0	(119.7)	(120.5)
2q0	118.8	148.7	123.1	150.8	167.4	(184.1)	(160.5)
5q0	147.0	191.1	172.0	220.8	(252.2)	(260.1)	(253.7)
1q1	28.8	52.2	45.5	60.0	83.0	(73.2)	(45.5)
3q2	32.0	49.7	55.8	82.4	(101.9)	(93.1)	(111.1)
4q1	59.9	99.4	98.7	137.5	(176.4)	(159.4)	(151.5)
48 or more months							
NN	21.4	27.4	13.0	(14.5)	(15.7)	(0.0)	—
P-NN	30.2	31.2	(40.6)	(20.9)	(34.6)	(105.3)	—
1q0	51.6	58.6	(53.6)	(35.4)	(50.2)	(105.3)	—
2q0	67.4	81.5	(82.3)	(57.5)	(61.4)	(105.3)	—
5q0	78.9	98.4	(99.5)	(85.1)	(102.5)	(105.3)	—
1q1	16.7	24.3	(30.4)	(22.9)	(11.8)	(0.0)	—
3q2	12.3	18.4	(18.7)	(29.3)	(43.8)	(0.0)	—
4q1	28.8	42.3	(48.5)	(51.5)	(55.0)	(0.0)	—

EGYPT 1980: A6. Probabilities of infant and child death by period and whether multiple birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Multiple births							
NN	(269.4)	(225.5)	(250.0)	(240.6)	(337.7)	(314.3)	(500.0)
P-NN	(186.6)	(201.4)	(301.1)	(273.9)	(242.1)	(270.1)	—
1q0	(455.9)	(427.0)	(551.1)	(514.5)	(579.8)	(584.4)	—
2q0	(491.1)	(516.6)	(627.6)	(550.9)	(651.3)	(722.9)	—
5q0	(496.3)	(566.5)	(671.4)	(502.1)	(715.9)	—	—
1q1	(64.6)	(156.4)	(170.5)	(75.0)	(170.2)	(333.3)	—
3q2	(10.3)	(103.2)	(117.6)	(113.9)	(185.2)	—	—
4q1	(74.2)	(243.5)	(268.0)	(180.4)	(323.9)	—	—
Single births							
NN	51.8	62.2	56.5	59.4	61.8	59.3	(61.6)
P-NN	70.0	74.9	73.1	83.3	94.9	123.2	(117.1)
1q0	121.8	137.2	129.7	142.7	156.7	182.6	(178.7)
2q0	153.9	188.8	182.3	210.7	231.8	279.0	(299.3)
5q0	180.6	228.6	231.7	275.1	317.3	(351.5)	(404.5)
1q1	36.5	59.9	60.4	79.2	89.0	117.9	(146.9)
3q2	31.6	49.0	60.5	81.6	111.3	(100.5)	(150.2)
4q1	67.0	106.0	117.3	154.4	190.4	(206.6)	(275.0)

EGYPT 1980: A7. Probabilities of infant and child death by calendar years and sex of child

Measure	Calendar years 1975-9	1970-4	1965-9	1960-4	1955-9	1950-4	1945-9
Males							
NN	61.8	78.1	71.7	76.8	75.7	89.9	(92.4)
P-NN	69.9	71.1	71.6	80.6	90.9	124.2	(74.5)
1q0	131.7	149.2	143.4	157.4	166.6	214.2	(166.9)
2q0	158.0	192.4	197.2	220.1	236.8	(310.1)	(278.0)
5q0	184.3	229.3	239.2	277.0	311.4	(382.3)	(396.5)
1q1	30.3	50.7	62.8	74.4	84.2	(122.0)	(133.3)
3q2	31.2	45.7	52.3	73.0	97.8	(104.7)	(164.2)
4q1	60.6	94.1	111.8	141.9	173.8	(214.0)	(275.6)
Females							
NN	56.1	58.1	51.4	50.0	62.8	38.0	(37.7)
P-NN	76.9	86.0	86.2	94.9	104.4	137.5	(135.7)
1q0	133.0	144.1	137.6	144.9	167.2	175.5	(173.4)
2q0	170.1	206.2	191.6	217.8	248.4	(271.8)	(299.5)
5q0	194.6	249.1	248.2	292.3	342.6	(339.1)	(404.6)
1q1	42.8	72.6	62.7	85.2	97.5	(116.8)	(152.5)
3q2	29.5	54.0	70.0	95.3	125.3	(92.4)	(150.0)
4q1	71.0	122.7	128.3	172.4	210.5	(198.4)	(279.7)
Both sexes							
NN	59.1	68.4	61.9	64.0	69.2	64.7	(67.1)
P-NN	73.3	78.3	78.6	87.5	97.7	130.7	(102.7)
1q0	132.3	146.7	140.6	151.4	166.9	195.4	(169.8)
2q0	163.9	198.9	194.5	219.1	242.6	291.5	(287.5)
5q0	189.3	238.7	243.6	284.6	327.0	(361.5)	(399.2)
1q1	36.3	61.2	62.8	79.7	90.9	119.5	(141.8)
3q2	30.4	49.7	60.9	83.9	111.5	(98.8)	(156.8)
4q1	65.6	107.8	119.8	156.9	192.2	(206.5)	(276.4)

EGYPT 1980: A8. Probabilities of infant and child death by cohort of birth

Measure	Year of birth prior to survey 1-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
NN	63.6	66.8	61.6	63.4	66.9	64.8	(65.4)
P-NN	73.9	78.3	78.2	87.7	94.9	122.8	(115.2)
1q0	137.5	145.0	139.8	151.1	161.8	187.6	(180.6)
2q0	171.1*	189.7	192.7	213.3	235.4	272.5	(303.7)
5q0	--	221.7	235.7	268.1	304.8	353.4	(382.2)
1q1	38.9*	52.3	61.5	73.3	87.8	104.5	(150.2)
3q2	--	39.4	53.2	69.7	90.8	111.2	(112.8)
4q1	--	89.6	111.4	137.9	170.6	204.1	(246.0)

* Two to four years prior to survey

MAURITANIA 1981-2: A1. Probabilities of infant and child death by period and sex of child

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Males							
NN	51.6	58.0	46.7	64.9	35.5	(94.8)	(93.2)
P-NN	46.3	34.2	44.9	54.1	(32.6)	(48.8)	(45.7)
1q0	97.9	92.2	91.6	119.0	(68.1)	(143.6)	(138.9)
2q0	138.3	124.6	118.8	158.5	(121.0)	(171.0)	(169.7)
5q0	199.3	183.6	174.3	(237.2)	(236.0)	(290.7)	(332.3)
1q1	44.8	35.7	30.0	44.8	(56.8)	(32.0)	(35.7)
3q2	70.8	67.4	63.0	(93.6)	(130.9)	(144.5)	(195.9)
4q1	112.4	100.7	91.1	(134.2)	(180.2)	(171.8)	(224.6)
Females							
NN	43.6	31.4	33.2	45.4	(60.6)	(38.4)	(80.0)
P-NN	38.1	42.6	34.2	44.7	(47.4)	(48.0)	(44.7)
1q0	81.7	73.9	67.4	90.1	(108.1)	(86.4)	(124.7)
2q0	123.8	113.3	103.1	130.2	(144.5)	(134.7)	(244.4)
5q0	192.3	178.1	157.6	(193.4)	(245.7)	(202.8)	(445.3)
1q1	45.9	42.5	38.3	44.1	(40.9)	(52.9)	(136.8)
3q2	78.1	73.1	60.7	(72.6)	(118.3)	(78.7)	(265.8)
4q1	120.4	112.4	96.7	(113.5)	(154.4)	(127.4)	(366.2)
Both sexes							
NN	47.8	45.6	40.2	55.7	47.0	70.2	(87.2)
P-NN	42.4	38.1	39.7	49.7	39.2	(48.4)	(45.2)
1q0	90.2	83.7	79.9	105.4	86.2	(118.6)	(132.4)
2q0	131.4	119.3	111.3	145.2	131.9	(155.5)	(203.3)
5q0	195.9	181.1	166.3	217.0	(240.4)	(252.7)	(381.5)
1q1	45.3	38.9	34.1	44.5	49.9	(41.9)	(81.7)
3q2	74.3	70.1	61.9	84.0	(125.1)	(115.1)	(223.7)
4q1	116.2	106.3	93.8	124.7	(168.8)	(152.1)	(287.2)

MAURITANIA 1981-2: A3. Children exposed to mortality by period

Age of exposure (months)	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
0- 1	4039	3608	2566	1612	982	502	183
1- 3	3818	3428	2430	1502	918	455	163
3- 6	3728	3352	2345	1434	880	426	151
6-12	3657	3263	2230	1394	817	393	131
12-24	3576	3061	2043	1311	714	350	108
24-36	3412	2761	1784	1145	589	284	71
36-48	3205	2503	1526	977	480	211	38
48-60	3037	2264	1364	844	416	151	22

MAURITANIA 1981-2: A2. Probabilities of infant and child death by period and age at birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 20 years							
NN	55.4	52.3	56.7	52.9	(61.8)	(84.0)	(84.7)
P-NN	44.3	46.5	41.8	49.4	(32.1)	(47.4)	(45.9)
1q0	99.6	98.8	98.5	102.4	(94.0)	(131.4)	(130.7)
2q0	134.9	130.6	129.7	127.8	(146.1)	(172.0)	(201.7)
5q0	185.1	196.9	(176.4)	(202.6)	(248.0)	(269.7)	(380.3)
1q1	39.2	35.3	34.6	28.3	(57.5)	(46.7)	(81.7)
3q2	58.1	76.3	(53.7)	(85.8)	(119.3)	(118.1)	(223.7)
4q1	95.0	108.8	(86.5)	(111.7)	(170.0)	(159.3)	(287.2)
20 to 29							
NN	42.2	37.6	33.5	61.2	(32.9)	(46.1)	(181.8)
P-NN	39.9	31.3	34.9	50.7	(45.4)	(51.1)	(0.0)
1q0	82.0	68.8	68.4	111.9	(78.4)	(97.1)	(181.8)
2q0	126.6	108.4	103.5	157.4	(117.7)	(123.9)	—
5q0	188.5	166.3	163.3	(227.6)	(231.6)	(225.7)	—
1q1	48.5	42.5	37.6	51.3	(42.7)	(29.7)	—
3q2	70.9	64.9	66.8	(83.3)	(129.1)	(116.2)	—
4q1	116.0	104.7	101.9	(130.2)	(166.3)	(142.4)	—
30 to 39							
NN	54.0	47.1	(25.6)	(41.7)	(41.7)	—	—
P-NN	38.6	38.1	(47.6)	(48.0)	(79.9)	—	—
1q0	92.6	85.2	(73.2)	(89.7)	(121.5)	—	—
2q0	125.4	117.5	(95.7)	(159.2)	—	—	—
5q0	209.3	(182.9)	(154.8)	(223.0)	—	—	—
1q1	36.2	35.3	(24.3)	(76.4)	—	—	—
3q2	96.0	(74.1)	(65.3)	(75.8)	—	—	—
4q1	128.6	(106.9)	(88.0)	(146.4)	—	—	—
40 or more							
NN	(39.0)	(103.1)	(90.9)	—	—	—	—
P-NN	(86.7)	(74.7)	—	—	—	—	—
1q0	(125.7)	(177.8)	—	—	—	—	—
2q0	(205.7)	(209.8)	—	—	—	—	—
5q0	(291.5)	(265.6)	—	—	—	—	—
1q1	(91.5)	(38.9)	—	—	—	—	—
3q2	(108.0)	(70.6)	—	—	—	—	—
4q1	(189.6)	(106.8)	—	—	—	—	—

MAURITANIA 1981-2: A4. Probabilities of infant and child death by period and birth order

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
First births							
NN	56.2	46.7	50.8	(64.3)	(59.4)	(72.7)	(92.4)
P-NN	48.7	44.3	37.1	(37.4)	(18.9)	(37.7)	(37.0)
1q0	104.9	91.0	87.9	(101.6)	(78.2)	(110.5)	(129.5)
2q0	131.8	123.3	(111.1)	(137.0)	(120.2)	(147.5)	(225.6)
5q0	183.2	167.2	(155.8)	(219.6)	(209.1)	(224.1)	(373.4)
1q1	30.1	35.5	(25.4)	(39.3)	(45.5)	(41.7)	(110.4)
3q2	59.2	50.1	(50.4)	(95.7)	(101.0)	(89.8)	(191.0)
4q1	87.5	83.8	(74.5)	(131.3)	(141.9)	(127.7)	(280.3)
Second and third births							
NN	33.5	42.9	34.2	54.9	(42.6)	(80.9)	(56.8)
P-NN	39.2	40.1	32.4	50.2	(48.3)	(39.8)	(60.8)
1q0	72.7	82.9	66.6	105.1	(90.9)	(120.7)	(117.6)
2q0	117.3	112.9	97.3	135.0	(134.9)	(158.1)	(153.3)
5q0	175.7	180.4	142.5	(201.7)	(241.0)	(286.7)	(404.7)
1q1	48.0	32.7	32.8	33.4	(48.4)	(42.5)	(40.4)
3q2	66.2	76.1	50.1	(77.1)	(122.7)	(152.8)	(297.0)
4q1	111.1	106.3	81.3	(107.9)	(165.2)	(188.8)	(325.4)
Fourth to sixth births							
NN	46.5	38.1	39.4	(50.6)	(40.2)	(33.7)	(272.7)
P-NN	26.6	28.1	39.6	(67.7)	(41.7)	(108.9)	(0.0)
1q0	73.1	66.1	79.1	(118.3)	(81.9)	(142.6)	(272.7)
2q0	110.3	114.6	119.6	(160.8)	(138.2)	(178.7)	(272.7)
5q0	176.7	180.0	(196.9)	(224.7)	(282.4)	(259.9)	—
1q1	40.2	51.9	44.0	(48.3)	(61.3)	(42.1)	(0.0)
3q2	74.6	73.9	(87.9)	(76.1)	(167.4)	(98.9)	—
4q1	111.8	122.0	(128.0)	(120.7)	(218.4)	(136.8)	—
Seventh or higher order births							
NN	63.4	65.2	(39.9)	(47.1)	(25.3)	(0.0)	—
P-NN	67.4	(46.5)	(68.9)	(21.7)	(126.0)	(0.0)	—
1q0	130.7	(111.7)	(108.9)	(68.8)	(151.3)	(0.0)	—
2q0	187.3	(138.8)	(137.5)	(187.1)	(177.0)	(0.0)	—
5q0	(274.0)	(206.5)	(197.2)	(265.3)	(394.3)	—	—
1q1	65.1	(30.5)	(32.1)	(127.1)	(30.3)	(0.0)	—
3q2	(106.7)	(78.6)	(69.2)	(96.1)	(264.1)	—	—
4q1	(164.9)	(106.8)	(99.1)	(211.0)	(286.4)	—	—

MAURITANIA 1981-2: A5. Probabilities of infant and child death by period and previous birth interval

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 24 months--ALL intervals							
NN	63.7	64.4	49.3	(59.0)	(29.9)	(62.5)	(136.4)
P-NN	50.8	44.0	48.7	(74.6)	(72.2)	(76.8)	(27.4)
1q0	114.5	108.4	98.1	(133.6)	(102.0)	(139.3)	(163.8)
2q0	159.7	144.7	(141.5)	(180.3)	(167.5)	(174.5)	(197.9)
5q0	217.9	214.0	(203.9)	(265.2)	(275.6)	(338.0)	(419.2)
1q1	51.0	40.7	(48.1)	(54.0)	(72.9)	(40.8)	(40.8)
3q2	69.3	81.0	(72.7)	(103.5)	(129.9)	(198.1)	(275.9)
4q1	116.8	118.4	(117.4)	(151.9)	(193.3)	(230.8)	(305.4)
Less than 24 months--SURVIVING intervals only							
NN	42.3	46.8	41.4	(38.4)	(37.3)	(48.8)	(28.6)
P-NN	47.1	35.9	(33.1)	(43.8)	(58.0)	(73.4)	(33.5)
1q0	89.4	82.7	(74.4)	(82.2)	(95.3)	(122.2)	(62.1)
2q0	129.6	114.0	(118.1)	(123.8)	(152.8)	(153.6)	(62.1)
5q0	181.3	173.6	(172.2)	(184.9)	(261.5)	(317.0)	(330.0)
1q1	44.1	34.1	(47.2)	(45.4)	(63.6)	(35.7)	(0.0)
3q2	59.5	67.3	(61.4)	(69.7)	(128.2)	(193.1)	(285.7)
4q1	100.9	99.1	(105.7)	(111.9)	(183.7)	(221.9)	(285.7)
24 to 47 months							
NN	34.5	31.4	29.1	43.5	(39.5)	(68.2)	(0.0)
P-NN	35.2	25.8	39.5	46.7	(40.4)	(39.3)	(44.0)
1q0	69.7	57.2	68.6	90.2	(79.8)	(107.5)	(44.0)
2q0	117.0	93.2	99.7	(131.6)	(121.2)	(144.8)	(83.0)
5q0	191.3	159.5	159.7	(186.7)	(252.0)	(223.7)	(346.2)
1q1	50.9	38.1	33.3	(45.5)	(45.0)	(41.8)	(40.8)
3q2	84.2	73.1	66.7	(63.5)	(148.8)	(92.2)	(287.0)
4q1	130.8	108.4	97.8	(106.1)	(187.1)	(130.2)	(316.1)
48 or more months							
NN	(26.5)	(16.1)	(16.5)	(30.9)	(78.9)	(133.3)	(0.0)
P-NN	(23.4)	(56.4)	(20.5)	(17.5)	(15.9)	(0.0)	(0.0)
1q0	(49.9)	(72.5)	(37.0)	(48.4)	(94.8)	(133.3)	(0.0)
2q0	(76.1)	(99.7)	(61.3)	(57.6)	(105.6)	(187.5)	(0.0)
5q0	(145.4)	(158.9)	(106.3)	(97.1)	(180.1)	(419.6)	—
1q1	(27.5)	(29.3)	(25.2)	(9.7)	(11.9)	(62.5)	(0.0)
3q2	(75.1)	(65.8)	(48.0)	(41.9)	(83.3)	(285.7)	—
4q1	(100.5)	(93.2)	(72.0)	(51.2)	(94.2)	(330.4)	—

MAURITANIA 1981-2: A6. Probabilities of infant and child death by period and whether multiple birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Multiple births							
NN	(101.9)	(208.3)	(260.4)	(464.3)	(66.7)	(0.0)	(400.0)
P-NN	(87.1)	(145.3)	(42.3)	(12.5)	(71.8)	(500.0)	(400.0)
1q0	(189.0)	(353.6)	(302.7)	(476.7)	(138.5)	(500.0)	(800.0)
2q0	(200.9)	(461.3)	(316.1)	(576.4)	(138.5)	(500.0)	(800.0)
5q0	(286.8)	(540.8)	(316.1)	(663.1)	—	(500.0)	(850.0)
1q1	(14.7)	(166.7)	(19.2)	(190.5)	(0.0)	(0.0)	(0.0)
3q2	(107.4)	(147.5)	(0.0)	(204.5)	—	(0.0)	(250.0)
4q1	(120.6)	(289.6)	(19.2)	(356.1)	—	(0.0)	(250.0)
Single births							
NN	46.5	43.3	36.7	49.7	46.8	70.5	(72.1)
P-NN	41.5	36.6	39.7	50.3	39.1	(46.7)	(26.7)
1q0	88.0	79.9	76.4	99.9	85.9	(117.2)	(98.8)
2q0	129.8	114.4	108.0	138.2	131.7	(154.3)	(174.8)
5q0	193.8	175.9	163.8	209.4	(239.4)	(252.2)	(358.4)
1q1	45.8	37.5	34.2	42.5	50.2	(42.0)	(84.3)
3q2	73.6	69.4	62.5	82.6	(123.9)	(115.8)	(222.4)
4q1	116.0	104.3	94.6	121.6	(167.9)	(152.9)	(288.0)

MAURITANIA 1981-2: A7. Probabilities of infant and child death by calendar years and sex of child

Measure	Calendar years 1975-9	1970-4	1965-9	1960-4	1955-9	1950-4	1945-9
Males							
NN	53.1	57.4	47.9	60.9	(43.1)	(111.5)	(66.7)
P-NN	45.8	33.2	46.3	46.3	(38.8)	(38.8)	(63.7)
1q0	98.9	90.6	94.2	107.2	(81.9)	(150.4)	(130.4)
2q0	132.8	124.5	123.3	(144.8)	(127.4)	(165.1)	(190.4)
5q0	191.0	179.2	(186.8)	(221.0)	(193.8)	(287.6)	(404.2)
1q1	37.6	37.3	32.1	(42.1)	(49.6)	(17.4)	(69.0)
3q2	67.2	62.4	(72.4)	(89.2)	(76.2)	(146.7)	(264.1)
4q1	102.2	97.4	(102.3)	(127.6)	(121.9)	(161.5)	(314.8)
Females							
NN	47.9	30.0	34.3	47.6	(69.6)	(50.9)	(16.1)
P-NN	35.2	36.6	37.8	(41.0)	(44.7)	(42.6)	(71.4)
1q0	83.1	66.6	72.1	(88.6)	(114.3)	(93.5)	(87.6)
2q0	121.2	111.2	108.5	(131.4)	(140.2)	(163.2)	(253.5)
5q0	178.0	176.2	(161.4)	(199.3)	(263.7)	(239.4)	(425.7)
1q1	41.5	47.8	39.2	(47.0)	(29.3)	(76.9)	(181.8)
3q2	64.7	73.2	(59.3)	(78.2)	(143.6)	(91.0)	(230.8)
4q1	103.5	117.5	(96.2)	(121.5)	(168.7)	(161.0)	(370.6)
Both sexes							
NN	50.6	44.6	41.3	54.8	54.8	(84.0)	(43.8)
P-NN	40.8	34.7	42.1	43.9	41.4	(40.5)	(67.3)
1q0	91.4	79.3	83.4	98.6	96.2	(124.5)	(111.1)
2q0	127.3	118.3	116.1	138.7	(133.2)	(165.3)	(215.6)
5q0	184.9	177.9	174.6	(211.4)	(225.3)	(264.8)	(418.7)
1q1	39.5	42.3	35.7	44.4	(41.0)	(46.6)	(117.6)
3q2	66.0	67.6	66.2	(84.4)	(106.2)	(119.2)	(258.8)
4q1	102.9	107.0	99.5	(125.0)	(142.9)	(160.2)	(346.0)

MAURITANIA 1981-2: A8. Probabilities of infant and child death by cohort of birth

Measure	Year of birth prior to survey 1-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
NN	48.1	46.5	39.1	56.6	48.2	67.2	(93.3)
P-NN	38.5	40.0	35.8	50.5	40.7	50.8	(44.4)
1q0	86.6	86.4	74.9	107.1	88.9	118.0	(137.8)
2q0	123.4*	122.4	107.8	147.3	131.2	154.1	(191.1)
5q0	--	183.5	169.1	206.0	218.4	237.7	(337.8)
1q1	40.2*	39.4	35.6	45.0	46.5	40.9	(61.9)
3q2	--	69.6	68.7	68.8	100.4	98.8	(181.3)
4q1	--	106.3	101.9	110.7	142.2	135.7	(232.0)

* Two to four years prior to survey

MOROCCO 1980: A1. Probabilities of infant and child death by period and sex of child

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Males							
NN	51.0	56.6	61.8	74.1	71.8	107.5	(128.9)
P-NN	42.7	48.4	47.4	49.2	82.2	(47.9)	(78.1)
1q0	93.6	105.0	109.2	123.3	154.0	(155.4)	(207.1)
2q0	115.5	136.7	147.3	171.0	202.4	(210.8)	(232.3)
5q0	140.6	166.7	185.3	209.6	(252.7)	(277.6)	(363.1)
1q1	24.1	35.4	42.8	54.5	57.2	(65.5)	(31.8)
3q2	28.4	34.7	44.5	46.5	(63.1)	(84.7)	(170.4)
4q1	51.8	69.0	85.4	98.5	(116.6)	(144.7)	(196.8)
Females							
NN	49.5	54.2	51.0	61.7	46.3	(59.7)	(108.6)
P-NN	38.9	43.9	44.6	57.9	51.4	(53.1)	(121.2)
1q0	88.5	98.1	95.5	119.6	97.7	(112.8)	(229.8)
2q0	122.3	124.6	140.0	163.7	145.8	(183.1)	(345.8)
5q0	143.2	154.1	174.4	204.2	(184.7)	(232.4)	(391.1)
1q1	37.2	29.5	49.2	50.1	53.3	(79.2)	(150.7)
3q2	23.8	33.6	39.9	48.4	(45.6)	(60.3)	(69.1)
4q1	60.0	62.1	87.2	96.1	(96.4)	(134.8)	(209.4)
Both sexes							
NN	50.3	55.4	56.5	67.9	59.0	85.6	(119.3)
P-NN	40.9	46.2	46.0	53.5	67.1	50.3	(98.3)
1q0	91.2	101.6	102.6	121.5	126.1	135.9	(217.6)
2q0	118.7	130.8	143.8	167.4	174.3	198.1	(287.3)
5q0	141.8	160.6	180.0	207.0	219.4	(257.1)	(373.7)
1q1	30.3	32.5	46.0	52.2	55.2	72.0	(89.1)
3q2	26.2	34.2	42.2	47.5	54.5	(73.5)	(121.1)
4q1	55.7	65.6	86.3	97.3	106.7	(140.3)	(199.4)

MOROCCO 1980: A3. Children exposed to mortality by period

Age of exposure (months)	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
0- 1	4496	4232	3555	2871	2025	1023	331
1- 3	4253	3985	3320	2683	1867	918	275
3- 6	4168	3911	3210	2643	1759	872	240
6-12	4090	3850	3102	2554	1653	806	204
12-24	3994	3707	2971	2345	1504	667	152
24-36	3848	3412	2738	2065	1257	488	95
36-48	3736	3188	2541	1868	1027	361	54
48-60	3643	3043	2374	1701	842	272	32

MOROCCO 1980: A2. Probabilities of infant and child death by period and age at birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 20 years							
NN	76.1	60.8	80.2	107.2	54.9	83.6	(116.2)
P-NN	57.0	52.7	51.8	59.2	79.7	(50.6)	(98.2)
1q0	133.0	113.4	132.0	166.3	134.6	(134.2)	(214.3)
2q0	168.1	138.5	179.6	211.5	181.4	(196.6)	(284.3)
5q0	197.7	172.3	(219.8)	259.0	(220.7)	(250.1)	(371.0)
1q1	40.4	28.3	54.9	54.2	54.1	(72.1)	(89.1)
3q2	35.6	39.2	(49.0)	60.2	(48.0)	(66.6)	(121.1)
4q1	74.6	66.4	(101.2)	111.1	(99.5)	(133.9)	(199.4)
20 to 29							
NN	44.0	51.3	53.8	52.3	61.5	(87.8)	(200.0)
P-NN	40.3	40.3	44.7	50.2	59.1	(50.4)	(266.7)
1q0	84.4	91.6	98.5	102.5	120.6	(138.2)	(466.7)
2q0	112.8	127.4	140.9	152.5	169.7	(200.1)	—
5q0	134.3	153.7	172.9	188.1	(219.7)	(275.6)	—
1q1	31.1	39.4	47.1	55.7	55.9	(71.9)	—
3q2	24.2	30.2	37.2	42.0	(60.2)	(94.4)	—
4q1	54.6	68.4	82.6	95.4	(112.7)	(159.5)	—
30 to 39							
NN	46.5	55.9	46.6	(71.6)	(45.5)	—	—
P-NN	36.1	50.7	44.9	(58.5)	(954.5)	—	—
1q0	82.7	106.6	91.5	(130.1)	(0.0)	—	—
2q0	109.4	126.4	124.8	(148.7)	(0.0)	—	—
5q0	131.6	160.5	(169.1)	(192.8)	(0.0)	—	—
1q1	29.1	22.1	36.6	(21.4)	—	—	—
3q2	25.0	39.1	(50.7)	(51.8)	—	—	—
4q1	53.4	60.3	(85.5)	(72.0)	—	—	—
40 or more							
NN	(62.4)	(84.2)	(0.0)	—	—	—	—
P-NN	(30.1)	(60.6)	—	—	—	—	—
1q0	(92.5)	(144.8)	—	—	—	—	—
2q0	(96.5)	(186.3)	—	—	—	—	—
5q0	(117.4)	(200.8)	—	—	—	—	—
1q1	(4.4)	(48.5)	—	—	—	—	—
3q2	(23.1)	(17.9)	—	—	—	—	—
4q1	(27.4)	(65.5)	—	—	—	—	—

MOROCCO 1980: A4. Probabilities of infant and child death by period and birth order

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
First births							
NN	59.9	57.1	77.8	(80.6)	54.5	(84.8)	(68.1)
P-NN	46.2	41.9	(47.8)	(50.3)	(60.2)	(54.7)	(83.3)
1q0	106.0	99.0	(125.7)	(130.9)	(114.8)	(139.5)	(151.4)
2q0	129.9	116.3	(161.5)	(162.5)	(155.2)	(177.0)	(213.8)
5q0	150.4	(138.9)	(196.4)	(201.7)	(205.6)	(232.4)	(321.5)
1q1	26.7	19.1	(41.0)	(36.3)	(45.7)	(43.6)	(73.5)
3q2	23.6	(25.6)	(41.6)	(46.9)	(59.6)	(67.3)	(136.9)
4q1	49.6	(44.3)	(80.9)	(81.4)	(102.6)	(108.0)	(200.4)
Second and third births							
NN	53.3	43.1	43.5	65.1	51.8	(71.7)	(152.6)
P-NN	43.1	38.3	43.3	56.3	74.1	(45.1)	(130.6)
1q0	96.4	81.4	86.9	121.4	125.9	(116.9)	(283.2)
2q0	128.4	115.6	132.8	177.4	175.9	(197.7)	(379.9)
5q0	160.9	136.2	163.9	224.0	(221.3)	(252.3)	(423.1)
1q1	35.5	37.3	50.3	63.8	57.2	(91.5)	(134.8)
3q2	37.3	23.2	35.9	56.6	(55.0)	(68.1)	(69.8)
4q1	71.4	59.7	84.4	116.8	(109.1)	(153.3)	(195.2)
Fourth to sixth births							
NN	34.7	43.7	55.8	56.0	68.2	(97.9)	(333.3)
P-NN	36.2	47.4	39.5	52.0	(62.6)	(53.0)	(58.0)
1q0	70.9	91.2	95.3	108.0	(130.8)	(150.9)	(391.3)
2q0	100.5	122.6	136.5	154.2	(180.9)	(220.1)	(391.3)
5q0	120.5	153.7	176.1	(188.7)	(218.0)	(325.3)	(391.3)
1q1	31.9	34.6	45.6	51.7	(57.6)	(81.5)	(0.0)
3q2	22.2	35.4	45.9	(40.8)	(45.3)	(134.8)	(0.0)
4q1	53.4	68.8	89.4	(90.4)	(100.3)	(205.3)	(0.0)
Seventh or higher order births							
NN	57.3	80.1	58.9	(89.7)	(84.3)	(343.8)	(0.0)
P-NN	40.6	55.0	60.2	(54.0)	(68.9)	(72.9)	(0.0)
1q0	97.9	135.1	119.1	(143.6)	(153.3)	(416.7)	(0.0)
2q0	120.9	163.6	157.7	(180.8)	(228.4)	(533.3)	(0.0)
5q0	139.7	206.2	(198.8)	(207.6)	(259.3)	(533.3)	(0.0)
1q1	25.5	33.0	43.8	(43.4)	(88.7)	(200.0)	—
3q2	21.3	50.9	(48.8)	(32.7)	(40.0)	(0.0)	—
4q1	46.3	82.2	(90.4)	(74.7)	(125.2)	(200.0)	—

MOROCCO 1980: A5. Probabilities of infant and child death by period and previous birth interval

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 24 months--ALL intervals							
NN	57.1	79.4	74.6	96.3	85.1	(100.8)	(207.3)
P-NN	56.8	66.4	62.7	73.7	95.7	(63.7)	(141.3)
1q0	113.9	145.9	137.3	170.0	180.8	(164.5)	(348.5)
2q0	146.4	192.7	197.2	237.4	245.1	(260.4)	(444.3)
5q0	174.5	234.3	242.3	289.8	(290.0)	(327.2)	(494.9)
1q1	36.7	54.8	69.5	81.1	78.5	(114.8)	(147.1)
3q2	32.9	51.6	56.1	68.8	(59.5)	(90.3)	(90.9)
4q1	68.4	103.5	121.7	144.3	(133.3)	(194.7)	(224.6)
Less than 24 months--SURVIVING intervals only							
NN	49.6	70.4	72.5	88.3	58.6	(60.4)	(149.1)
P-NN	57.7	57.5	55.8	65.3	(78.6)	(49.0)	(135.5)
1q0	107.4	127.9	128.4	153.6	(137.3)	(109.4)	(284.6)
2q0	134.6	173.2	182.9	217.8	(199.3)	(187.8)	(351.2)
5q0	164.1	217.0	227.2	(274.1)	(240.2)	(256.1)	(405.2)
1q1	30.5	52.0	62.5	75.8	(71.9)	(88.0)	(93.0)
3q2	34.1	52.9	54.2	(72.0)	(51.0)	(84.1)	(83.3)
4q1	63.6	102.2	113.3	(142.4)	(119.3)	(164.7)	(168.6)
24 to 47 months							
NN	39.4	32.3	30.1	30.2	29.7	(60.6)	(155.6)
P-NN	28.2	32.5	33.8	34.5	(37.7)	(16.1)	(81.1)
1q0	67.6	64.8	63.9	64.7	(67.3)	(76.7)	(236.6)
2q0	94.7	86.3	94.7	99.9	(103.5)	(128.0)	(293.2)
5q0	115.1	111.5	127.1	128.4	(146.9)	(194.3)	(293.2)
1q1	29.1	23.0	32.9	37.6	(38.7)	(55.6)	(74.1)
3q2	22.5	27.6	35.8	31.7	(48.5)	(76.0)	(0.0)
4q1	51.0	49.9	67.5	68.1	(85.3)	(127.3)	(74.1)
48 or more months							
NN	(32.1)	(17.1)	(22.4)	(17.3)	(0.0)	(30.3)	(0.0)
P-NN	(20.4)	(29.6)	(6.7)	(20.2)	(18.9)	(0.0)	(0.0)
1q0	(52.5)	(46.7)	(29.1)	(37.5)	(18.9)	(30.3)	(0.0)
2q0	(70.3)	(56.5)	(42.0)	(61.9)	(57.5)	(80.0)	(0.0)
5q0	(92.1)	(70.9)	(48.0)	(77.1)	(75.1)	(80.0)	—
1q1	(18.8)	(10.3)	(13.3)	(25.4)	(39.4)	(51.3)	(0.0)
3q2	(23.4)	(15.3)	(6.3)	(16.1)	(18.7)	(0.0)	—
4q1	(41.8)	(25.4)	(19.5)	(41.1)	(57.3)	(51.3)	—

MOROCCO 1980: A6. Probabilities of infant and child death by period and whether multiple birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Multiple births							
NN	(236.0)	(323.2)	(371.4)	(375.0)	(300.0)	(250.0)	(250.0)
P-NN	(97.0)	(63.7)	(107.0)	(134.4)	(107.5)	(250.0)	(0.0)
1q0	(333.0)	(387.0)	(478.5)	(509.4)	(407.5)	(500.0)	(250.0)
2q0	(354.5)	(423.0)	(516.2)	(556.6)	(431.2)	(552.6)	(250.0)
5q0	(359.8)	(430.9)	(582.2)	(591.6)	(471.9)	(552.6)	(250.0)
1q1	(32.3)	(58.8)	(72.3)	(96.2)	(40.0)	(105.3)	(0.0)
3q2	(8.3)	(13.7)	(136.5)	(78.9)	(71.4)	(0.0)	(0.0)
4q1	(40.3)	(71.7)	(198.9)	(167.5)	(108.6)	(105.3)	(0.0)
Single births							
NN	46.5	49.0	50.2	60.9	55.4	82.3	(117.7)
P-NN	39.7	45.8	44.6	51.9	66.5	46.3	(99.7)
1q0	86.3	94.8	94.9	112.8	121.9	128.6	(217.4)
2q0	113.9	123.9	136.1	158.7	170.5	190.9	(288.1)
5q0	137.3	154.1	171.6	198.4	215.6	(251.3)	(376.5)
1q1	30.3	32.1	45.6	51.8	55.3	71.5	(90.3)
3q2	26.4	34.5	41.1	47.2	54.4	(74.6)	(124.1)
4q1	55.9	65.5	84.8	96.5	106.7	(140.8)	(203.2)

MOROCCO 1980: A7. Probabilities of infant and child death by calendar years and sex of child

Measure	Calendar years 1975-9	1970-4	1965-9	1960-4	1955-9	1950-4	1945-9
Males							
NN	48.2	59.3	61.4	72.7	73.1	114.1	(107.7)
P-NN	42.3	47.2	48.9	49.6	87.9	(49.1)	(81.4)
1q0	90.5	106.5	110.3	122.3	161.0	(163.2)	(189.1)
2q0	111.1	137.1	149.8	174.8	212.6	(224.7)	(209.4)
5q0	130.6	169.7	184.2	214.4	(264.3)	(301.3)	(382.0)
1q1	22.6	34.3	44.4	59.8	61.5	(73.5)	(25.0)
3q2	22.0	37.8	40.5	48.0	(65.8)	(98.8)	(218.3)
4q1	44.1	70.7	83.1	104.9	(123.2)	(165.0)	(237.9)
Females							
NN	52.7	52.9	52.9	55.0	49.7	(61.4)	(129.4)
P-NN	38.4	40.7	45.1	61.6	48.0	(57.3)	(110.3)
1q0	91.1	93.6	98.0	116.6	97.7	(118.7)	(239.7)
2q0	123.5	122.6	139.5	160.3	152.1	(196.6)	(375.0)
5q0	145.4	153.8	176.2	197.4	(187.1)	(243.4)	(406.5)
1q1	35.7	32.0	46.1	49.5	60.4	(88.4)	(178.0)
3q2	24.9	35.5	42.6	44.2	(41.3)	(58.2)	(50.3)
4q1	59.7	66.4	86.7	91.4	(99.1)	(141.5)	(219.3)
Both sexes							
NN	50.3	56.1	57.3	63.8	61.6	89.6	(117.8)
P-NN	40.5	44.0	47.1	55.6	68.4	52.9	(95.9)
1q0	90.8	100.1	104.4	119.4	130.0	142.4	(213.6)
2q0	117.0	130.0	144.9	167.4	183.0	211.4	(292.9)
5q0	137.7	161.9	180.4	205.8	227.0	(274.4)	(395.6)
1q1	28.8	33.2	45.2	54.5	60.9	80.4	(100.8)
3q2	23.4	36.7	41.5	46.1	53.8	(79.9)	(145.2)
4q1	51.5	68.6	84.9	98.1	111.5	(153.9)	(231.4)

MOROCCO 1980: A8. Probabilities of infant and child death by cohort of birth

Measure	Year of birth prior to survey 1-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
NN	50.5	55.4	54.3	68.1	61.4	84.6	(118.2)
P-NN	38.2	47.8	45.4	52.4	62.9	56.7	(86.5)
1q0	88.7	103.2	99.7	120.5	124.3	141.3	(204.6)
2q0	119.2*	132.0	138.1	165.3	166.3	210.6	(265.1)
5q0	--	155.3	170.0	202.5	206.7	265.4	(328.5)
1q1	33.6*	32.1	42.6	50.9	47.9	80.6	(76.1)
3q2	--	26.9	37.0	44.5	48.5	69.4	(86.3)
4q1	--	58.1	78.1	93.2	94.1	144.5	(155.8)

* Two to four years prior to survey

TUNISIA 1978: A1. Infant and Child Death Probabilities by Period and sex of child

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Males							
NN	45.6	36.8	31.9	42.8	62.2	(85.5)	(67.8)
P-NN	38.2	37.1	45.0	71.9	80.9	(78.8)	(248.6)
1q0	83.8	73.9	76.8	114.8	143.1	(164.3)	(316.4)
2q0	100.5	102.6	110.2	162.3	200.1	(238.5)	(392.4)
5q0	109.7	127.1	137.4	201.4	(249.3)	(315.1)	(392.4)
1q1	18.2	31.0	36.1	53.7	66.6	(88.8)	(111.1)
3q2	10.3	27.3	30.6	46.7	(61.5)	(100.6)	(0.0)
4q1	28.3	57.4	65.6	97.9	(124.0)	(180.5)	(111.1)
Females							
NN	31.2	36.7	27.8	40.6	44.5	(53.1)	(33.6)
P-NN	45.2	40.8	53.2	65.2	90.0	(110.0)	(133.2)
1q0	76.4	77.4	81.0	105.9	134.5	(163.1)	(166.9)
2q0	91.1	106.1	120.1	154.7	195.0	(198.3)	(285.9)
5q0	107.1	132.8	145.2	188.3	(250.0)	(232.7)	(285.9)
1q1	15.9	31.0	42.6	54.6	69.9	(42.1)	(142.9)
3q2	17.6	29.9	28.6	39.8	(68.3)	(42.9)	(0.0)
4q1	33.3	60.0	69.9	92.2	(133.4)	(83.2)	(142.9)
Both sexes							
NN	38.7	36.8	29.9	41.8	53.9	70.8	(50.6)
P-NN	41.5	39.0	49.0	68.7	85.2	(92.7)	(189.1)
1q0	80.3	75.7	78.9	110.5	139.1	(163.5)	(239.8)
2q0	96.0	104.4	115.1	158.6	197.8	(220.3)	(338.2)
5q0	108.5	130.0	141.2	195.2	249.8	(277.1)	(338.2)
1q1	17.1	31.0	39.3	54.1	68.2	(67.9)	(129.4)
3q2	13.8	28.6	29.6	43.4	64.8	(72.9)	(0.0)
4q1	30.7	58.7	67.7	95.2	128.5	(135.8)	(129.4)

TUNISIA 1978: A3. Children exposed to mortality by period

Age of exposure (months)	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
0- 1	4931	4231	3919	2908	1745	622	119
1- 3	4723	4056	3791	2760	1626	548	108
3- 6	4635	3994	3726	2665	1524	493	91
6-12	4518	3941	3605	2543	1394	444	71
12-24	4353	3822	3373	2310	1166	346	43
24-36	4146	3670	3003	1980	905	229	20
36-48	3929	3608	2715	1705	705	148	9
48-60	3767	3492	2489	1452	545	96	3

TUNISIA 1978: A2. Infant and Child Death Probabilities by Period and age at birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 20 years							
NN	(51.9)	(68.9)	(41.7)	(30.5)	(78.9)	(71.4)	(50.6)
P-NN	(32.1)	(44.4)	(58.1)	(88.7)	(107.9)	(97.1)	(189.1)
1q0	(84.0)	(113.3)	(99.9)	(119.1)	(186.8)	(168.5)	(239.8)
2q0	(91.8)	(138.5)	(128.2)	(179.0)	(250.0)	(232.6)	(338.2)
5q0	(100.5)	(158.3)	(148.9)	(215.6)	(303.1)	(291.8)	(338.2)
1q1	(8.6)	(28.5)	(31.5)	(67.9)	(77.8)	(77.1)	(129.4)
3q2	(9.5)	(23.0)	(23.7)	(44.6)	(70.7)	(77.1)	(0.0)
4q1	(18.0)	(50.8)	(54.5)	(109.5)	(143.0)	(148.2)	(129.4)
20 to 29							
NN	33.9	37.0	30.0	41.6	44.7	(70.1)	—
P-NN	40.7	38.7	49.8	66.2	76.1	(81.7)	—
1q0	74.5	75.7	79.9	107.8	120.7	(151.7)	—
2q0	91.0	104.2	113.0	153.6	177.0	(190.1)	—
5q0	102.1	126.6	140.3	190.0	(227.7)	(234.1)	—
1q1	17.8	30.8	36.0	51.4	64.0	(45.2)	—
3q2	12.2	25.0	30.8	43.0	(61.6)	(54.3)	—
4q1	29.8	55.0	65.7	92.2	(121.6)	(97.1)	—
30 to 39							
NN	35.9	32.0	25.7	(55.8)	—	—	—
P-NN	39.6	38.4	44.2	(59.0)	—	—	—
1q0	75.4	70.4	69.9	(114.8)	—	—	—
2q0	91.9	99.9	116.0	(160.5)	—	—	—
5q0	106.2	132.3	(141.0)	(186.3)	—	—	—
1q1	17.8	31.7	49.6	(51.7)	—	—	—
3q2	15.8	36.0	(28.3)	(30.7)	—	—	—
4q1	33.3	66.5	(76.5)	(80.8)	—	—	—
40 or more							
NN	(72.3)	(15.6)	—	—	—	—	—
P-NN	(64.0)	(37.8)	—	—	—	—	—
1q0	(136.3)	(53.4)	—	—	—	—	—
2q0	(150.7)	(84.2)	—	—	—	—	—
5q0	(169.9)	(84.2)	—	—	—	—	—
1q1	(16.7)	(32.5)	—	—	—	—	—
3q2	(22.6)	(0.0)	—	—	—	—	—
4q1	(38.9)	(32.5)	—	—	—	—	—

TUNISIA 1978: A4. Infant and Child Death Probabilities by Period and birth order

Measure	Years prior to survey 0–4	5–9	10–14	15–19	20–24	25–29	30–34
First births							
NN	30.6	47.0	37.1	38.6	61.1	(86.7)	(55.6)
P-NN	42.5	32.7	52.6	60.6	(72.6)	(90.3)	(204.9)
1q0	73.1	79.7	89.7	99.3	(133.7)	(177.0)	(260.4)
2q0	82.9	105.4	125.9	152.7	(177.9)	(239.4)	(386.0)
5q0	87.8	123.8	142.4	(180.2)	(231.2)	(289.0)	(386.0)
1q1	10.6	27.9	39.7	59.4	(51.1)	(75.9)	(169.8)
3q2	5.3	20.6	18.9	(32.4)	(64.8)	(65.2)	(0.0)
4q1	15.8	47.9	57.9	(89.8)	(112.6)	(136.1)	(169.8)
Second and third births							
NN	37.7	33.0	27.1	32.8	39.6	(55.4)	(47.1)
P-NN	32.8	37.3	45.5	57.2	85.4	(98.8)	(176.5)
1q0	70.5	70.2	72.6	90.1	125.0	(154.3)	(223.6)
2q0	84.4	92.6	103.6	126.9	189.9	(212.3)	(275.4)
5q0	97.8	113.6	131.4	171.1	(245.7)	(271.7)	(275.4)
1q1	15.0	24.0	33.4	40.5	74.1	(68.6)	(66.7)
3q2	14.6	23.2	31.0	50.6	(68.9)	(75.4)	(0.0)
4q1	29.3	46.7	63.4	89.0	(137.9)	(138.9)	(66.7)
Fourth to sixth births							
NN	23.6	30.7	31.8	49.2	(72.3)	(53.1)	(0.0)
P-NN	33.6	35.5	48.6	84.0	(101.8)	(83.0)	(0.0)
1q0	57.2	66.2	80.4	133.2	(174.1)	(136.1)	(0.0)
2q0	77.8	100.4	117.1	190.3	(244.3)	(136.1)	(0.0)
5q0	90.7	125.6	146.5	(228.2)	(278.3)	(235.1)	—
1q1	21.9	36.6	39.9	65.9	(85.0)	(0.0)	(0.0)
3q2	14.0	28.0	33.3	(46.7)	(45.0)	(114.6)	—
4q1	35.6	63.6	71.9	(109.5)	(126.2)	(114.6)	—
Seventh or higher order births							
NN	68.3	45.3	23.4	(64.0)	(63.5)	(0.0)	—
P-NN	64.1	52.5	53.5	(90.1)	(137.7)	(0.0)	—
1q0	132.4	97.8	76.8	(154.1)	(201.2)	(0.0)	—
2q0	148.1	128.1	(125.1)	(215.9)	(301.0)	—	—
5q0	164.5	169.8	(153.1)	(224.6)	(440.8)	—	—
1q1	18.1	33.5	(52.3)	(73.0)	(125.0)	—	—
3q2	19.3	47.9	(32.0)	(11.1)	(200.0)	—	—
4q1	37.0	79.8	(82.6)	(83.3)	(300.0)	—	—

TUNISIA 1978: A5. Infant and Child Death Probabilities by Period and previous birth interval

Measure	Years prior to survey 0–4	5–9	10–14	15–19	20–24	25–29	30–34
Less than 24 months—ALL intervals							
NN	61.3	49.9	43.9	55.2	56.2	(71.6)	(51.9)
P-NN	56.0	69.8	72.2	95.5	124.1	(120.4)	(188.9)
1q0	117.3	119.7	116.1	150.6	180.2	(192.0)	(240.8)
2q0	144.3	162.5	163.8	212.3	(279.2)	(231.0)	(295.0)
5q0	160.8	195.6	199.8	(267.1)	(325.3)	(282.3)	(295.0)
1q1	30.6	48.6	54.0	72.6	(120.7)	(48.3)	(71.4)
3q2	19.3	39.5	43.0	(69.5)	(64.0)	(66.7)	(0.0)
4q1	49.3	86.2	94.7	(137.1)	(176.9)	(111.8)	(71.4)
Less than 24 months—SURVIVING intervals only							
NN	53.6	42.1	33.6	46.9	45.5	(58.4)	(42.6)
P-NN	49.3	71.3	69.0	85.3	(122.8)	(100.5)	(274.1)
1q0	102.9	113.4	102.6	132.2	(168.3)	(158.9)	(316.6)
2q0	130.2	152.0	149.7	191.5	(251.0)	(175.9)	(316.6)
5q0	149.0	186.5	178.2	(253.7)	(305.8)	(251.5)	(316.6)
1q1	30.4	43.5	52.5	68.4	(99.5)	(20.1)	(0.0)
3q2	21.7	40.8	33.6	(76.9)	(73.1)	(91.7)	(0.0)
4q1	51.4	82.4	84.3	(140.0)	(165.3)	(110.0)	(0.0)
24 to 47 months							
NN	22.9	22.8	16.2	30.2	(45.6)	(20.9)	(0.0)
P-NN	32.5	22.2	27.4	44.3	(45.7)	(24.5)	(0.0)
1q0	55.4	45.0	43.6	74.5	(91.3)	(45.4)	(0.0)
2q0	65.3	68.0	73.4	104.5	(106.4)	(118.2)	(0.0)
5q0	79.2	92.3	98.9	(129.7)	(177.2)	(245.3)	—
1q1	10.5	24.1	31.2	32.5	(16.7)	(76.2)	(0.0)
3q2	14.9	26.0	27.5	(28.1)	(79.2)	(144.1)	—
4q1	25.2	49.5	57.8	(59.7)	(94.5)	(209.4)	—
48 or more months							
NN	15.9	(9.2)	(6.3)	(6.2)	(0.0)	(0.0)	—
P-NN	(11.9)	(9.4)	(12.8)	(23.8)	(15.6)	(45.5)	—
1q0	(27.8)	(18.6)	(19.1)	(30.0)	(15.6)	(45.5)	—
2q0	(40.6)	(28.7)	(31.7)	(59.4)	(47.7)	(151.5)	—
5q0	(48.6)	(41.6)	(38.7)	(68.9)	(47.7)	(151.5)	—
1q1	(13.2)	(10.3)	(12.8)	(30.3)	(32.6)	(111.1)	—
3q2	(8.3)	(13.3)	(7.2)	(10.1)	(0.0)	(0.0)	—
4q1	(21.4)	(23.4)	(19.9)	(40.1)	(32.6)	(111.1)	—

TUNISIA 1978: A6. Infant and Child Death Probabilities by Period and whether multiple birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Multiple births							
NN	(167.9)	(195.1)	(74.8)	(148.9)	(130.4)	(214.3)	—
P-NN	(107.6)	(107.4)	(143.7)	(246.2)	(169.9)	(286.8)	—
1q0	(275.6)	(302.5)	(218.4)	(395.2)	(300.3)	(501.1)	—
2q0	(287.3)	(326.1)	(269.8)	(478.9)	(383.6)	(501.1)	—
5q0	(291.2)	(352.8)	(300.2)	(510.3)	(383.6)	(501.1)	—
1q1	(16.1)	(33.9)	(65.7)	(138.5)	(119.0)	(0.0)	—
3q2	(5.5)	(39.5)	(41.7)	(60.2)	(0.0)	(0.0)	—
4q1	(21.5)	(72.1)	(104.6)	(190.3)	(119.0)	(0.0)	—
Single births							
NN	35.2	32.0	28.6	40.0	51.8	67.5	(50.6)
P-NN	39.7	36.9	46.4	65.6	82.9	(89.6)	(189.1)
1q0	74.9	68.9	75.0	105.6	134.7	(157.1)	(239.8)
2q0	90.8	97.8	110.8	152.9	192.9	(215.0)	(338.2)
5q0	103.5	123.3	136.9	189.3	245.9	(272.8)	(338.2)
1q1	17.1	30.9	38.7	52.9	67.2	(68.7)	(129.4)
3q2	14.0	28.3	29.3	42.9	65.6	(73.6)	(0.0)
4q1	30.9	58.4	66.9	93.6	128.4	(137.2)	(129.4)

TUNISIA 1978: A7. Infant and Child Death Probabilities by calendar years and sex of child

Measure	Calendar years 1975-9	1970-4	1965-9	1960-4	1955-9	1950-4	1945-9
Males							
NN	46.9	43.1	29.8	45.6	51.5	(73.7)	(78.0)
P-NN	34.2	41.5	36.7	66.6	85.4	(69.5)	(162.8)
1q0	81.1	84.7	66.5	112.3	137.0	(143.2)	(240.8)
2q0	95.7	111.9	96.8	156.5	190.9	(210.6)	(324.2)
5q0	104.5	134.6	120.2	193.3	(232.3)	(286.8)	(390.1)
1q1	16.0	29.8	32.4	49.8	62.5	(78.7)	(109.8)
3q2	9.7	25.5	25.8	43.7	(51.1)	(96.5)	(97.6)
4q1	25.5	54.5	57.4	91.3	(110.4)	(167.6)	(196.6)
Females							
NN	34.5	34.5	32.5	27.8	48.3	(63.4)	(20.6)
P-NN	38.9	45.3	44.7	66.8	80.2	(93.1)	(185.7)
1q0	73.5	79.9	77.1	94.7	128.5	(156.5)	(206.3)
2q0	86.6	107.2	108.9	143.9	189.0	(196.5)	(316.0)
5q0	102.2	131.3	133.2	174.1	(241.8)	(233.2)	(342.3)
1q1	14.1	29.7	34.4	54.4	69.4	(47.4)	(138.3)
3q2	17.1	27.0	27.2	35.3	(65.1)	(45.6)	(38.5)
4q1	31.1	55.9	60.7	87.8	(130.0)	(90.9)	(171.4)
Both sexes							
NN	41.0	38.9	31.1	37.0	50.0	68.9	(50.1)
P-NN	36.4	43.4	40.6	66.7	82.9	80.5	(173.7)
1q0	77.4	82.3	71.8	103.7	132.9	149.4	(223.8)
2q0	91.4	109.6	102.8	150.3	190.0	204.3	(320.8)
5q0	103.5	133.0	126.6	184.0	236.8	(262.1)	(364.7)
1q1	15.1	29.7	33.4	52.0	65.8	64.5	(125.0)
3q2	13.4	26.3	26.5	39.6	57.8	(72.6)	(64.5)
4q1	28.3	55.2	59.0	89.6	119.8	(132.4)	(181.5)

TUNISIA 1978: A8. Probabilities of infant and child death by cohort of birth

Measure	Year of birth prior to survey 1-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
NN	41.2	36.4	30.9	41.1	52.3	73.2	(48.0)
P-NN	36.8	41.8	45.5	68.5	84.3	87.2	(176.0)
1q0	78.0	78.1	76.5	109.6	136.6	160.4	(224.0)
2q0	94.6*	105.1	107.6	156.1	191.7	211.8	(320.0)
5q0	--	122.7	133.0	182.2	237.2	260.1	(384.0)
1q1	18.0*	29.3	33.8	52.2	63.8	61.2	(123.7)
3q2	--	19.7	28.4	31.0	56.3	61.3	(94.1)
4q1	--	48.4	61.2	81.6	116.5	118.7	(206.2)

* Two to four years prior to survey

YEMEN 1979: A1. Probabilities of infant and child death by period and sex of child

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Males							
NN	60.0	68.8	85.1	78.1	(110.2)	(147.4)	(79.5)
P-NN	106.3	113.2	131.5	(170.0)	(160.1)	(225.3)	(466.6)
1q0	166.3	182.0	216.6	(248.1)	(270.4)	(372.8)	(546.1)
2q0	200.8	227.7	281.4	(325.0)	(334.6)	(434.9)	(708.4)
5q0	238.4	281.2	(344.4)	(407.3)	(419.2)	(534.3)	(742.3)
1q1	41.3	56.0	82.8	(102.3)	(88.0)	(99.0)	(357.6)
3q2	47.1	69.2	(87.6)	(121.9)	(127.2)	(175.9)	(116.4)
4q1	86.5	121.3	(163.2)	(211.7)	(204.0)	(257.5)	(432.4)
Females							
NN	56.6	50.6	59.3	59.3	(49.8)	(34.8)	(190.9)
P-NN	99.7	101.8	135.0	(150.6)	(128.4)	(229.9)	(471.6)
1q0	156.4	152.4	194.3	(209.8)	(178.3)	(264.7)	(662.5)
2q0	191.6	211.7	267.8	(276.0)	(276.3)	(379.5)	(662.5)
5q0	234.5	269.5	(332.9)	(336.3)	(381.4)	(429.2)	(724.4)
1q1	41.8	70.0	91.2	(83.8)	(119.3)	(156.0)	(0.0)
3q2	53.0	73.2	(88.9)	(83.2)	(145.2)	(80.1)	(183.5)
4q1	92.6	138.1	(172.0)	(160.0)	(247.2)	(223.6)	(183.5)
Both sexes							
NN	58.4	60.1	73.4	68.9	80.2	(94.3)	(120.4)
P-NN	103.1	107.8	133.1	160.5	(144.1)	(228.9)	(471.5)
1q0	161.5	167.9	206.6	229.5	(224.3)	(323.2)	(591.9)
2q0	196.4	220.1	275.5	301.3	(305.8)	(408.7)	(684.1)
5q0	236.5	275.4	339.3	(372.8)	(400.5)	(486.6)	(732.1)
1q1	41.6	62.6	86.8	93.2	(105.1)	(126.3)	(225.8)
3q2	50.0	71.0	88.1	(102.3)	(136.4)	(131.8)	(152.1)
4q1	89.4	129.2	167.2	(186.0)	(227.1)	(241.5)	(343.6)

YEMEN 1979: A3. Children exposed to mortality by period

Age of exposure (months)	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
0- 1	3441	2570	1686	1141	522	221	58
1- 3	3193	2391	1544	1035	471	193	47
3- 6	3022	2256	1418	917	412	167	33
6-12	2828	2131	1313	841	360	140	25
12-24	2618	1926	1184	725	310	104	14
24-36	2418	1621	988	552	240	68	8
36-48	2230	1371	862	420	184	42	6
48-60	2019	1206	771	351	140	27	4

YEMEN 1979: A2. Probabilities of infant and child death by period and age at birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 20 years							
NN	85.2	84.3	(99.1)	(91.0)	(101.2)	(110.8)	(125.5)
P-NN	(107.2)	(132.9)	(172.8)	(144.5)	(135.4)	(180.7)	(476.7)
1q0	(192.4)	(217.2)	(271.8)	(235.5)	(236.6)	(291.5)	(602.2)
2q0	(208.7)	(257.1)	(326.1)	(325.4)	(318.0)	(376.8)	(692.0)
5q0	(257.1)	(325.3)	(394.1)	(393.7)	(415.2)	(439.6)	(738.9)
1q1	(20.2)	(50.9)	(74.6)	(117.6)	(106.6)	(120.3)	(225.8)
3q2	(61.2)	(91.9)	(100.8)	(101.3)	(142.6)	(100.8)	(152.1)
4q1	(80.2)	(138.1)	(167.9)	(207.0)	(234.0)	(209.0)	(343.6)
20 to 29							
NN	54.3	54.7	69.5	65.2	(67.2)	(66.3)	(0.0)
P-NN	108.5	99.6	116.9	(171.6)	(151.4)	(319.2)	(0.0)
1q0	162.8	154.2	186.4	(236.8)	(218.5)	(385.5)	(0.0)
2q0	202.8	213.5	261.9	(294.0)	(299.6)	(473.1)	—
5q0	234.8	268.8	(321.9)	(367.1)	(391.4)	(603.8)	—
1q1	47.7	70.1	92.9	(75.0)	(103.7)	(142.5)	—
3q2	40.2	70.3	(81.2)	(103.5)	(131.0)	(248.1)	—
4q1	86.0	135.4	(166.5)	(170.7)	(221.2)	(355.2)	—
30 to 39							
NN	45.5	56.7	(49.8)	(22.6)	(0.0)	—	—
P-NN	88.6	98.6	(113.0)	(161.5)	—	—	—
1q0	134.0	155.3	(162.9)	(184.1)	—	—	—
2q0	172.8	(205.1)	(237.9)	(269.3)	—	—	—
5q0	(223.6)	(247.9)	(303.6)	(340.6)	—	—	—
1q1	44.8	(59.0)	(89.6)	(104.3)	—	—	—
3q2	(61.4)	(53.8)	(86.2)	(97.6)	—	—	—
4q1	(103.5)	(109.6)	(168.1)	(191.8)	—	—	—
40 or more							
NN	(66.3)	(27.6)	(0.0)	—	—	—	—
P-NN	(101.4)	(128.7)	—	—	—	—	—
1q0	(167.8)	(156.3)	—	—	—	—	—
2q0	(197.8)	(201.1)	—	—	—	—	—
5q0	(237.6)	(260.1)	—	—	—	—	—
1q1	(36.1)	(53.1)	—	—	—	—	—
3q2	(49.6)	(73.8)	—	—	—	—	—
4q1	(83.9)	(123.0)	—	—	—	—	—

YEMEN 1979: A4. Probabilities of infant and child death by period and birth order

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
First births							
NN	87.9	(69.4)	(89.2)	(60.8)	(67.5)	(135.0)	(155.2)
P-NN	107.5	(103.8)	(123.0)	(160.5)	(110.8)	(137.4)	(471.4)
1q0	195.3	(173.2)	(212.2)	(221.4)	(178.4)	(272.4)	(626.6)
2q0	(223.2)	(213.4)	(268.3)	(267.9)	(226.0)	(332.8)	(677.9)
5q0	(259.8)	(278.3)	(301.5)	(312.8)	(297.2)	(454.5)	(677.9)
1q1	(34.6)	(48.7)	(71.2)	(59.8)	(57.9)	(83.0)	(137.3)
3q2	(47.2)	(82.4)	(45.5)	(61.3)	(92.1)	(182.4)	(0.0)
4q1	(80.2)	(127.1)	(113.4)	(117.4)	(144.7)	(250.2)	(137.3)
Second and third births							
NN	54.2	57.5	71.0	(59.5)	(98.1)	(66.9)	(83.6)
P-NN	96.0	96.9	132.5	(141.8)	(147.3)	(219.7)	(484.9)
1q0	150.2	154.4	203.5	(201.3)	(245.4)	(286.6)	(568.5)
2q0	178.9	204.1	(285.0)	(278.8)	(336.9)	(402.6)	(666.6)
5q0	223.1	(260.9)	(360.1)	(361.7)	(463.2)	(445.9)	(780.5)
1q1	33.8	58.8	(102.3)	(97.1)	(121.3)	(162.5)	(227.4)
3q2	53.9	(71.3)	(105.1)	(115.0)	(190.4)	(72.5)	(341.7)
4q1	85.8	(126.0)	(196.6)	(200.8)	(288.6)	(223.2)	(491.4)
Fourth to sixth births							
NN	41.4	45.7	65.1	(103.8)	(65.8)	(65.6)	(0.0)
P-NN	103.1	108.0	(124.4)	(125.3)	(188.7)	(472.2)	(333.3)
1q0	144.5	153.7	(189.5)	(229.1)	(254.4)	(537.8)	(333.3)
2q0	182.2	223.9	(252.6)	(338.0)	(353.9)	(618.3)	(0.0)
5q0	227.2	(270.5)	(344.0)	(445.9)	(429.0)	(661.6)	(0.0)
1q1	44.1	83.0	(77.8)	(141.3)	(133.4)	(174.3)	(0.0)
3q2	55.0	(60.0)	(122.3)	(163.0)	(116.3)	(113.4)	—
4q1	96.7	(138.0)	(190.6)	(281.2)	(234.2)	(267.9)	(0.0)
Seventh or higher order births							
NN	62.1	(81.4)	(76.0)	(48.1)	(83.6)	(0.0)	—
P-NN	109.9	(135.1)	(188.9)	(379.2)	(133.4)	(0.0)	—
1q0	172.0	(216.5)	(264.9)	(427.3)	(216.9)	(0.0)	—
2q0	(219.1)	(251.4)	(329.0)	(458.4)	(389.8)	—	—
5q0	(246.9)	(315.8)	(350.0)	(472.6)	(458.8)	—	—
1q1	(57.0)	(44.6)	(87.2)	(54.2)	(220.7)	—	—
3q2	(35.6)	(86.0)	(31.4)	(26.2)	(113.2)	—	—
4q1	(90.6)	(126.8)	(115.8)	(79.0)	(308.9)	—	—

YEMEN 1979: A5. Probabilities of infant and child death by period and previous birth interval

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 24 months--ALL intervals							
NN	67.1	70.6	89.7	96.2	(84.5)	(92.0)	(0.0)
P-NN	152.1	151.6	189.6	(182.9)	(161.6)	(327.6)	(507.9)
1q0	219.2	222.1	279.3	(279.1)	(246.1)	(419.7)	(507.9)
2q0	261.3	302.1	374.0	(371.6)	(350.8)	(539.0)	(636.7)
5q0	315.8	(371.4)	(460.4)	(447.9)	(467.0)	(561.7)	(693.6)
1q1	53.9	102.9	131.4	(128.3)	(138.9)	(205.7)	(261.8)
3q2	73.8	(99.3)	(138.0)	(121.4)	(179.1)	(49.1)	(156.6)
4q1	123.7	(191.9)	(251.2)	(234.2)	(293.1)	(244.7)	(377.4)
Less than 24 months--SURVIVING intervals only							
NN	57.4	46.5	64.0	(57.0)	(41.6)	(28.9)	(0.0)
P-NN	135.1	128.5	(148.7)	(125.3)	(124.7)	(257.6)	(187.1)
1q0	192.5	175.0	(212.7)	(182.2)	(166.4)	(286.6)	(187.1)
2q0	236.0	255.1	(285.8)	(264.8)	(275.5)	(374.2)	(187.1)
5q0	289.8	(329.6)	(376.5)	(353.5)	(404.0)	(425.0)	(364.2)
1q1	53.8	97.1	(92.8)	(101.0)	(130.9)	(122.8)	(0.0)
3q2	70.4	(99.9)	(127.0)	(120.6)	(177.3)	(81.1)	(217.8)
4q1	120.4	(187.3)	(208.1)	(209.4)	(285.0)	(194.0)	(217.8)
24 to 47 months							
NN	33.7	48.0	(36.5)	(33.9)	(113.6)	(0.0)	(180.0)
P-NN	49.8	63.9	(67.3)	(130.8)	(160.4)	(170.4)	(493.7)
1q0	83.5	111.9	(103.9)	(164.8)	(274.1)	(170.4)	(673.7)
2q0	113.0	145.2	(147.8)	(238.5)	(357.3)	(239.3)	(814.3)
5q0	134.8	(190.4)	(198.6)	(356.7)	(453.9)	(298.0)	(0.0)
1q1	32.1	37.4	(49.0)	(88.3)	(114.7)	(83.1)	(430.9)
3q2	24.6	(52.9)	(59.6)	(155.1)	(150.3)	(77.1)	(0.0)
4q1	56.0	(88.3)	(105.7)	(229.7)	(247.8)	(153.8)	(0.0)
48 or more months							
NN	(26.5)	(15.6)	(51.9)	(0.0)	(0.0)	(0.0)	(0.0)
P-NN	(53.4)	(27.5)	(15.0)	(76.7)	(155.2)	(548.8)	(0.0)
1q0	(79.9)	(43.1)	(66.9)	(76.7)	(155.2)	(548.8)	(0.0)
2q0	(111.4)	(45.8)	(81.7)	(120.5)	(155.2)	(548.8)	—
5q0	(136.9)	(53.2)	(136.5)	(159.4)	(225.2)	(654.1)	—
1q1	(34.2)	(2.9)	(15.8)	(47.4)	(0.0)	(0.0)	—
3q2	(28.7)	(7.8)	(59.7)	(44.3)	(82.9)	(233.5)	—
4q1	(61.9)	(10.6)	(74.6)	(89.7)	(82.9)	(233.5)	—

YEMEN 1979: A6. Probabilities of infant and child death by period and whether multiple birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Multiple births							
NN	(365.2)	(208.0)	(58.8)	(0.0)	(0.0)	(0.0)	—
P-NN	(115.9)	(354.6)	(199.0)	(0.0)	(0.0)	(725.4)	—
1q0	(481.1)	(562.5)	(257.7)	(0.0)	(0.0)	(725.4)	—
2q0	(481.1)	(622.8)	(414.2)	(0.0)	(0.0)	(0.0)	—
5q0	(588.7)	(779.3)	(671.1)	(0.0)	(0.0)	(0.0)	—
1q1	(0.0)	(137.7)	(210.8)	—	—	(0.0)	—
3q2	(207.4)	(415.0)	(438.6)	—	—	—	—
4q1	(207.4)	(495.6)	(556.9)	—	—	(0.0)	—
Single births							
NN	55.4	59.3	73.6	68.2	78.5	(95.8)	(120.4)
P-NN	103.0	106.4	132.6	160.7	(144.4)	(220.2)	(471.5)
1q0	158.4	165.7	206.1	228.8	(222.9)	(316.0)	(591.9)
2q0	193.6	217.7	274.4	300.7	(303.4)	(399.7)	(684.1)
5q0	233.6	272.0	337.4	(372.2)	(398.4)	(478.8)	(732.1)
1q1	41.8	62.4	86.0	93.2	(103.7)	(122.3)	(225.8)
3q2	49.6	69.4	86.8	(102.3)	(136.4)	(131.8)	(152.1)
4q1	89.3	127.4	165.4	(186.0)	(225.9)	(238.0)	(343.6)

YEMEN 1979: A7. Probabilities of infant and child death by calendar years and sex of child

Measure	Calendar years 1975-9	1970-4	1965-9	1960-4	1955-9	1950-4	1945-9
Males							
NN	64.2	68.6	83.5	72.8	(113.1)	(140.7)	(57.3)
P-NN	99.3	116.9	129.6	(167.1)	(160.2)	(230.9)	(382.1)
1q0	163.5	185.5	213.2	(239.9)	(273.2)	(371.6)	(439.4)
2q0	193.3	231.6	277.1	(312.8)	(342.7)	(437.6)	(639.9)
5q0	228.3	283.6	(342.2)	(390.9)	(431.6)	(534.9)	(677.0)
1q1	35.6	56.6	81.2	(96.0)	(95.6)	(105.1)	(357.6)
3q2	43.4	67.7	(90.1)	(113.5)	(135.3)	(173.0)	(103.1)
4q1	77.5	120.5	(164.0)	(198.6)	(217.9)	(259.9)	(423.8)
Females							
NN	56.2	51.4	54.8	60.8	(50.2)	(39.4)	(180.8)
P-NN	96.3	100.7	129.5	(155.0)	(127.8)	(215.7)	(463.0)
1q0	152.6	152.1	184.3	(215.8)	(177.9)	(255.1)	(643.8)
2q0	190.1	211.5	257.3	(282.8)	(271.3)	(373.8)	(643.8)
5q0	236.5	268.6	(324.9)	(339.2)	(384.3)	(421.6)	(715.8)
1q1	44.3	70.0	89.5	(85.4)	(113.5)	(159.4)	(0.0)
3q2	57.3	72.4	(91.0)	(78.6)	(155.1)	(76.3)	(202.1)
4q1	99.0	137.3	(172.3)	(157.3)	(251.0)	(223.5)	(202.1)
Both sexes							
NN	60.4	60.3	70.7	67.0	81.6	(93.2)	(103.8)
P-NN	97.9	109.2	129.6	161.2	(143.8)	(224.4)	(416.4)
1q0	158.2	169.6	200.3	228.2	(225.4)	(317.6)	(520.2)
2q0	191.8	221.9	268.3	298.2	(307.0)	(407.1)	(631.7)
5q0	232.3	276.2	334.3	(365.5)	(407.8)	(482.0)	(687.1)
1q1	39.9	63.0	85.1	90.7	(105.3)	(131.1)	(232.5)
3q2	50.1	69.8	90.2	(95.9)	(145.4)	(126.4)	(150.4)
4q1	88.0	128.4	167.6	(177.9)	(235.5)	(240.9)	(347.9)

YEMEN 1979: A8. Probabilities of infant and child death by cohort of birth

Measure	Year of birth prior to survey 1-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
NN	59.8	60.0	72.9	65.6	81.5	(96.6)	(117.4)
P-NN	97.7	109.2	127.5	161.0	143.8	(213.2)	(341.1)
1q0	157.5	169.1	200.4	226.5	225.4	(309.7)	(458.5)
2q0	181.0*	218.7	261.8	303.6	293.6	(393.7)	(546.8)
5q0	--	263.5	322.3	366.5	380.2	(475.7)	(587.0)
1q1	27.8*	59.6	76.8	99.6	88.0	(121.7)	(163.1)
3q2	--	57.4	81.9	90.4	122.7	(135.3)	(88.6)
4q1	--	113.6	152.4	181.0	199.9	(240.5)	(237.2)

* Two to four years prior to survey

ECUADOR 1979-80: A1. Probabilities of infant and child death by period and sex of child

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Males							
NN	40.0	46.5	48.7	51.6	60.8	(62.1)	(142.9)
P-NN	45.4	44.0	58.0	72.7	56.2	(87.7)	(130.2)
1q0	85.4	90.5	106.6	124.3	117.0	(149.8)	(273.1)
2q0	108.7	121.2	134.2	148.7	157.8	(179.9)	(379.5)
5q0	127.5	137.4	157.7	176.6	(185.7)	(208.0)	(379.5)
1q1	25.5	33.7	30.9	27.9	46.3	(35.4)	(146.3)
3q2	21.1	18.5	27.1	32.7	(33.1)	(34.3)	(0.0)
4q1	46.1	51.6	57.2	59.7	(77.9)	(68.5)	(146.3)
Females							
NN	35.1	34.1	44.8	50.3	41.6	(50.5)	(61.9)
P-NN	31.0	45.4	44.1	53.8	74.5	(84.3)	(97.4)
1q0	66.1	79.5	88.9	104.0	116.1	(134.7)	(159.3)
2q0	88.7	110.3	123.1	145.9	157.3	(197.7)	(199.3)
5q0	107.7	133.0	148.4	169.4	(189.1)	(235.9)	(359.4)
1q1	24.2	33.4	37.5	46.8	46.7	(72.7)	(47.6)
3q2	20.9	25.6	28.8	27.5	(37.7)	(47.6)	(200.0)
4q1	44.6	58.1	65.3	73.0	(82.6)	(116.9)	(238.1)
Both sexes							
NN	37.6	40.3	46.8	51.0	51.3	56.5	(102.6)
P-NN	38.1	44.7	51.2	63.6	65.2	86.1	(114.9)
1q0	75.7	85.0	98.0	114.6	116.4	142.6	(217.5)
2q0	98.6	115.8	128.8	147.4	157.5	(189.3)	(292.9)
5q0	117.6	135.2	153.2	173.1	187.3	(222.7)	(361.3)
1q1	24.8	33.6	34.2	37.0	46.5	(54.5)	(96.4)
3q2	21.0	21.9	28.0	30.2	35.3	(41.2)	(96.8)
4q1	45.3	54.8	61.2	66.1	80.2	(93.5)	(183.8)

ECUADOR 1979-80: A3. Children exposed to mortality by period

Age of exposure (months)	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
0- 1	5098	4701	3869	2796	1677	682	98
1- 3	4910	4484	3678	2621	1563	620	80
3-12	4799	4339	3545	2446	1389	508	62
12-24	4550	4078	3274	2150	1205	376	42
24-60	4284	3623	2736	1690	821	182	16

ECUADOR 1979-80: A2. Probabilities of infant and child death by period and age at birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 20 years							
NN	39.3	52.0	52.5	76.2	66.1	(68.3)	(102.6)
P-NN	46.1	55.2	59.9	65.7	(71.1)	(79.7)	(114.9)
1q0	85.3	107.2	112.4	141.9	(137.2)	(148.0)	(217.5)
2q0	108.5	140.3	149.6	(169.5)	(171.4)	(198.5)	(292.9)
5q0	128.1	153.7	171.0	(192.5)	(201.4)	(236.8)	(361.3)
1q1	25.4	37.0	42.0	(32.2)	(39.7)	(59.3)	(96.4)
3q2	21.9	15.6	25.1	(27.7)	(36.1)	(47.8)	(96.8)
4q1	46.7	52.0	66.0	(59.0)	(74.4)	(104.2)	(183.8)
20 to 29							
NN	34.0	32.8	44.2	43.0	44.6	(40.9)	--
P-NN	35.2	39.2	50.9	64.4	62.2	(95.0)	--
1q0	69.2	72.0	95.1	107.4	106.7	(135.8)	--
2q0	92.1	102.4	127.8	142.3	151.6	(173.6)	--
5q0	109.2	122.9	153.3	169.1	(181.1)	(185.2)	--
1q1	24.6	32.7	36.2	39.2	50.3	(43.7)	--
3q2	18.9	22.9	29.2	31.2	(34.7)	(14.1)	--
4q1	43.0	54.9	64.3	69.1	(83.3)	(57.1)	--
30 to 39							
NN	43.1	44.0	48.7	(48.7)	--	--	--
P-NN	37.4	49.0	45.5	(53.4)	--	--	--
1q0	80.5	93.0	94.2	(102.0)	--	--	--
2q0	102.1	121.4	114.8	(129.7)	--	--	--
5q0	121.9	141.8	(138.3)	(155.6)	--	--	--
1q1	23.5	31.3	22.7	(30.8)	--	--	--
3q2	22.0	23.2	(26.6)	(29.7)	--	--	--
4q1	45.0	53.8	(48.7)	(59.6)	--	--	--
40 or more							
NN	(42.6)	(83.7)	--	--	--	--	--
P-NN	(48.7)	(50.4)	--	--	--	--	--
1q0	(91.3)	(134.1)	--	--	--	--	--
2q0	(122.1)	(198.0)	--	--	--	--	--
5q0	(160.3)	(237.1)	--	--	--	--	--
1q1	(33.9)	(73.8)	--	--	--	--	--
3q2	(43.5)	(48.8)	--	--	--	--	--
4q1	(75.9)	(119.0)	--	--	--	--	--

ECUADOR 1979-80: A4. Probabilities of infant and child death by period and birth order

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
First births							
NN	25.5	35.8	47.5	67.8	56.9	(49.1)	(112.9)
P-NN	21.2	45.1	48.8	63.2	(55.7)	(56.1)	(73.9)
1q0	46.8	80.9	96.3	131.0	(112.6)	(105.2)	(186.8)
2q0	61.3	95.9	119.6	154.6	(143.2)	(156.1)	(259.4)
5q0	77.4	107.7	135.9	(178.0)	(161.5)	(183.5)	(294.7)
1q1	15.3	16.4	25.8	27.1	(34.5)	(56.9)	(89.3)
3q2	17.1	13.0	18.5	(27.7)	(21.4)	(32.4)	(47.6)
4q1	32.1	29.2	43.8	(54.1)	(55.1)	(87.5)	(132.7)
Second and third births							
NN	28.7	38.4	37.1	43.1	56.5	(65.8)	(64.5)
P-NN	47.5	36.9	42.0	51.3	73.1	(114.4)	(220.0)
1q0	76.2	75.3	79.1	94.4	129.6	(180.2)	(284.5)
2q0	96.4	109.7	116.5	127.8	171.6	(220.3)	(370.4)
5q0	112.9	130.9	138.2	150.1	(199.9)	(263.9)	(496.3)
1q1	21.9	37.2	40.6	36.9	48.3	(49.0)	(120.0)
3q2	18.3	23.8	24.5	25.5	(34.1)	(56.0)	(200.0)
4q1	39.8	60.0	64.1	61.5	(80.8)	(102.2)	(296.0)
Fourth to sixth births							
NN	43.4	38.1	54.3	36.3	(37.6)	(55.2)	(222.2)
P-NN	33.0	42.6	55.9	77.3	(65.6)	(99.2)	(0.0)
1q0	76.5	80.7	110.2	113.6	(103.2)	(154.4)	(222.2)
2q0	111.3	113.5	140.1	152.8	(153.6)	(212.7)	(222.2)
5q0	131.8	134.3	164.9	(187.8)	(212.5)	(248.5)	--
1q1	37.7	35.7	33.6	44.3	(56.2)	(69.0)	(0.0)
3q2	23.1	23.5	28.9	(41.3)	(69.5)	(45.5)	--
4q1	59.9	58.3	61.5	(83.7)	(121.8)	(111.3)	--
Seventh or higher order births							
NN	55.9	50.0	51.0	(86.1)	(21.1)	(0.0)	--
P-NN	47.7	58.5	63.5	(71.7)	(50.1)	(250.0)	--
1q0	103.7	108.6	114.5	(157.7)	(71.2)	(250.0)	--
2q0	123.6	145.1	(142.8)	(192.0)	(176.3)	(250.0)	--
5q0	146.3	166.9	(188.1)	(210.5)	(248.0)	(250.0)	--
1q1	22.3	41.0	(32.0)	(40.6)	(113.2)	(0.0)	--
3q2	25.9	25.5	(52.9)	(23.0)	(87.0)	(0.0)	--
4q1	47.6	65.4	(83.2)	(62.7)	(190.3)	(0.0)	--

ECUADOR 1979-80: A5. Probabilities of infant and child death by period and previous birth interval

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 24 months--ALL intervals							
NN	48.4	53.1	59.6	66.5	57.5	(77.1)	(74.1)
P-NN	59.1	54.3	71.6	80.3	83.4	(115.5)	(103.0)
1q0	107.5	107.3	131.3	146.9	141.0	(192.6)	(177.1)
2q0	139.2	146.9	169.3	195.2	(192.1)	(239.2)	(251.9)
5q0	162.1	170.0	201.3	231.6	(241.4)	(291.4)	(438.9)
1q1	35.6	44.3	43.8	56.6	(59.5)	(57.8)	(90.9)
3q2	26.6	27.1	38.5	45.2	(61.0)	(68.6)	(250.0)
4q1	61.3	70.2	80.6	99.2	(116.8)	(122.4)	(318.2)
Less than 24 months--SURVIVING intervals only							
NN	43.2	45.9	50.8	56.5	46.1	(49.6)	(55.6)
P-NN	54.4	46.0	60.5	72.2	(68.4)	(122.3)	(149.3)
1q0	97.6	91.9	111.3	128.7	(114.4)	(171.9)	(204.8)
2q0	128.2	134.3	142.4	172.6	(167.3)	(201.8)	(204.8)
5q0	149.8	156.4	175.3	208.1	(208.1)	(245.6)	(432.0)
1q1	33.9	46.7	35.0	50.4	(59.7)	(36.1)	(0.0)
3q2	24.8	25.6	38.4	42.9	(49.0)	(54.8)	(285.7)
4q1	57.9	71.1	72.0	91.1	(105.8)	(89.0)	(285.7)
24 to 47 months							
NN	35.1	28.9	29.5	17.3	(29.8)	(36.7)	(153.8)
P-NN	30.9	33.6	30.3	48.7	(43.5)	(113.9)	(407.4)
1q0	66.0	62.5	59.8	65.9	(73.3)	(150.6)	(561.3)
2q0	90.2	90.9	85.5	85.6	(117.8)	(192.3)	(707.5)
5q0	108.3	110.0	107.7	(97.7)	(133.4)	(192.3)	(707.5)
1q1	25.9	30.3	27.3	21.1	(48.0)	(49.0)	(333.3)
3q2	19.9	21.0	24.3	(13.3)	(17.7)	(0.0)	(0.0)
4q1	45.3	50.7	51.0	(34.0)	(64.9)	(49.0)	(333.3)
48 or more months							
NN	28.8	(25.2)	(31.6)	(0.0)	(57.1)	(0.0)	(0.0)
P-NN	28.7	(33.2)	(24.8)	(23.3)	(55.8)	(0.0)	(0.0)
1q0	57.5	(58.4)	(56.4)	(23.3)	(113.0)	(0.0)	(0.0)
2q0	(65.3)	(87.5)	(74.8)	(50.4)	(113.0)	(0.0)	(0.0)
5q0	(78.1)	(104.7)	(80.2)	(79.5)	(137.6)	(111.1)	(0.0)
1q1	(8.3)	(30.9)	(19.5)	(27.7)	(0.0)	(0.0)	(0.0)
3q2	(13.8)	(18.9)	(5.9)	(30.7)	(27.8)	(111.1)	(0.0)
4q1	(21.9)	(49.2)	(25.3)	(57.5)	(27.8)	(111.1)	(0.0)

ECUADOR 1979-80: A6. Probabilities of infant and child death by period and whether multiple birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Multiple births							
NN	(228.1)	(158.5)	(183.3)	(351.9)	(222.2)	(166.7)	(0.0)
P-NN	(116.5)	(145.2)	(144.8)	(60.8)	(194.4)	(277.8)	(500.0)
1q0	(344.6)	(303.7)	(328.1)	(412.6)	(416.7)	(444.4)	(500.0)
2q0	(369.8)	(382.5)	(440.1)	(447.2)	(416.7)	(444.4)	(500.0)
5q0	(376.7)	(406.0)	(476.2)	(447.2)	(416.7)	(444.4)	--
1q1	(38.5)	(113.2)	(166.7)	(58.8)	(0.0)	(0.0)	(0.0)
3q2	(11.0)	(38.0)	(64.5)	(0.0)	(0.0)	(0.0)	--
4q1	(49.0)	(146.9)	(220.4)	(58.8)	(0.0)	(0.0)	--
Single births							
NN	35.4	38.2	44.6	45.0	49.4	55.5	(104.7)
P-NN	37.2	42.9	49.7	63.7	63.8	84.9	(103.6)
1q0	72.6	81.2	94.4	108.8	113.2	140.4	(208.3)
2q0	95.5	111.1	123.8	141.5	154.7	(187.6)	(285.5)
5q0	114.6	130.4	147.9	167.7	184.7	(221.4)	(354.7)
1q1	24.7	32.5	32.5	36.7	46.7	(54.9)	(97.6)
3q2	21.1	21.8	27.5	30.5	35.5	(41.7)	(96.8)
4q1	45.3	53.6	59.1	66.1	80.6	(94.3)	(184.9)

ECUADOR 1979-80: A7. Probabilities of infant and child death by calendar years and sex of child

Measure	Calendar years 1975-9	1970-4	1965-9	1960-4	1955-9	1950-4	1945-9
Males							
NN	38.7	47.6	48.4	51.3	56.4	(66.4)	(115.7)
P-NN	45.2	44.4	58.2	70.2	55.2	(87.0)	(129.2)
1q0	83.8	92.0	106.5	121.5	111.6	(153.4)	(244.9)
2q0	108.3	122.2	135.6	144.8	151.5	(182.8)	(350.3)
5q0	125.5	138.8	158.1	173.0	(179.4)	(210.6)	(350.3)
1q1	26.7	33.2	32.5	26.5	45.0	(34.7)	(139.5)
3q2	19.3	19.0	26.0	32.9	(32.8)	(34.0)	(0.0)
4q1	45.5	51.6	57.7	58.6	(76.4)	(67.5)	(139.5)
Females							
NN	34.6	33.3	44.8	49.9	44.4	(46.5)	(52.6)
P-NN	29.0	44.8	43.9	52.6	73.6	(84.0)	(105.8)
1q0	63.6	78.1	88.7	102.4	118.0	(130.5)	(158.5)
2q0	87.1	108.9	121.7	145.9	156.7	(194.7)	(196.7)
5q0	101.9	131.2	145.8	171.2	(188.0)	(228.7)	(338.5)
1q1	25.2	33.4	36.2	48.4	43.9	(73.8)	(45.5)
3q2	16.2	25.1	27.4	29.7	(37.1)	(42.3)	(176.5)
4q1	40.9	57.6	62.6	76.7	(79.3)	(112.9)	(213.9)
Both sexes							
NN	36.6	40.4	46.6	50.6	50.5	56.9	(85.1)
P-NN	37.1	44.6	51.2	61.8	64.3	85.6	(117.5)
1q0	73.7	85.0	97.8	112.4	114.7	142.5	(202.6)
2q0	97.7	115.5	128.8	145.2	154.1	(189.4)	(275.9)
5q0	113.7	134.9	152.1	172.0	183.6	(220.3)	(339.8)
1q1	25.9	33.3	34.3	37.0	44.4	(54.7)	(92.0)
3q2	17.7	22.0	26.7	31.4	34.9	(38.2)	(88.2)
4q1	43.2	54.6	60.1	67.2	77.8	(90.8)	(172.1)

ECUADOR 1979-80: A8. Probabilities of infant and child death by cohort of birth

Measure	Year of birth prior to survey 1-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
NN	37.7	39.3	47.4	51.0	51.3	55.5	(103.8)
P-NN	38.2	44.0	50.0	59.1	67.7	85.3	(94.3)
1q0	75.9	83.3	97.5	110.1	119.0	140.8	(198.1)
2q0	97.3*	114.8	124.5	145.8	155.2	183.5	(273.6)
5q0	--	132.5	143.6	172.0	182.0	213.4	(301.9)
1q1	23.1*	34.3	30.0	40.2	41.1	49.7	(94.1)
3q2	--	20.1	21.8	30.7	31.8	36.6	(39.0)
4q1	--	53.7	51.1	69.6	71.5	84.4	(129.4)

* Two to four years prior to survey

PORTUGAL 1979-80: A1. Probabilities of infant and child death by period and sex of child

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Males							
NN	27.1	31.7	27.6	32.6	37.0	(48.6)	(0.0)
P-NN	8.9	25.3	26.1	38.9	46.4	(49.1)	(0.0)
1q0	36.0	57.0	53.7	71.5	83.4	(97.8)	(0.0)
2q0	38.9	61.2	60.0	83.7	(94.6)	(133.0)	(0.0)
5q0	38.9	64.4	64.7	90.5	(97.2)	(146.3)	—
1q1	3.0	4.5	6.6	13.1	(12.3)	(39.0)	(0.0)
3q2	0.0	3.4	5.1	7.4	(2.9)	(15.4)	—
4q1	3.0	7.9	11.6	20.4	(15.1)	(53.8)	—
Females							
NN	19.1	12.2	24.0	31.5	36.5	(31.2)	(0.0)
P-NN	11.3	20.3	22.1	26.3	27.6	(43.8)	(0.0)
1q0	30.4	32.5	46.0	57.8	64.1	(75.0)	(0.0)
2q0	30.8	36.8	53.1	65.5	(70.5)	(75.0)	(0.0)
5q0	34.0	39.1	55.8	77.7	(79.1)	(75.0)	—
1q1	0.4	4.4	7.4	8.2	(6.8)	(0.0)	(0.0)
3q2	3.3	2.5	2.9	13.1	(9.3)	(0.0)	—
4q1	3.7	6.9	10.2	21.1	(16.1)	(0.0)	—
Both sexes							
NN	23.3	22.3	25.9	32.0	36.7	(39.7)	(0.0)
P-NN	10.0	22.9	24.3	32.8	37.5	(46.5)	(0.0)
1q0	33.3	45.2	50.2	64.9	74.2	(86.3)	(0.0)
2q0	35.1	49.5	56.8	74.9	83.1	(103.9)	(0.0)
5q0	36.6	52.3	60.6	84.3	(88.7)	(110.9)	—
1q1	1.8	4.5	7.0	10.7	9.6	(19.3)	(0.0)
3q2	1.6	3.0	4.0	10.2	(6.2)	(7.8)	—
4q1	3.3	7.4	11.0	20.8	(15.7)	(27.0)	—

PORTUGAL 1979-80: A3. Children exposed to mortality by period

Age of exposure (months)	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
0- 1	2509	2730	2603	2122	1252	378	14
1- 3	2464	2672	2528	2024	1192	344	13
3- 6	2469	2656	2485	1972	1133	314	10
6-12	2500	2611	2447	1901	1043	275	7
12-24	2529	2573	2374	1773	890	208	4
24-36	2562	2562	2263	1595	706	128	2
36-48	2586	2523	2155	1413	547	65	1
48-60	2588	2475	2030	1234	408	29	0

PORTUGAL 1979-80: A2. Probabilities of infant and child death by period and age at birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 20 years							
NN	(29.4)	(32.8)	(34.8)	(30.7)	(86.8)	(59.0)	(0.0)
P-NN	(9.6)	(21.4)	(49.0)	(75.7)	(24.9)	(68.5)	(0.0)
1q0	(39.0)	(54.2)	(83.9)	(106.4)	(111.7)	(127.5)	(0.0)
2q0	(39.0)	(54.2)	(96.1)	(121.5)	(111.7)	(144.7)	(0.0)
5q0	(39.0)	(61.7)	(105.1)	(137.4)	(115.5)	(156.1)	—
1q1	(0.0)	(0.0)	(13.3)	(16.9)	(0.0)	(19.7)	(0.0)
3q2	(0.0)	(7.9)	(10.0)	(18.2)	(4.3)	(13.3)	—
4q1	(0.0)	(7.9)	(23.2)	(34.7)	(4.3)	(32.8)	—
20 to 29							
NN	19.4	18.4	23.2	32.0	31.4	(28.9)	—
P-NN	12.7	23.1	20.1	32.2	38.9	(33.1)	—
1q0	32.1	41.4	43.3	64.2	70.3	(62.0)	—
2q0	34.1	44.9	48.6	74.1	80.3	(79.7)	—
5q0	36.0	46.4	52.1	83.3	(85.7)	(79.7)	—
1q1	2.0	3.6	5.6	10.6	10.7	(18.9)	—
3q2	2.0	1.6	3.7	9.9	(5.8)	(0.0)	—
4q1	4.0	5.2	9.3	20.4	(16.5)	(18.9)	—
30 to 39							
NN	29.6	26.4	29.6	(32.7)	—	—	—
P-NN	2.9	19.2	27.8	(16.2)	—	—	—
1q0	32.5	45.6	57.4	(48.9)	—	—	—
2q0	32.5	50.5	65.4	(56.5)	—	—	—
5q0	33.7	54.9	(68.5)	(56.5)	—	—	—
1q1	0.0	5.1	8.5	(8.0)	—	—	—
3q2	1.2	4.7	(3.4)	(0.0)	—	—	—
4q1	1.2	9.8	(11.8)	(8.0)	—	—	—
40 or more							
NN	(27.9)	(36.1)	—	—	—	—	—
P-NN	(17.7)	(69.8)	—	—	—	—	—
1q0	(45.6)	(106.0)	—	—	—	—	—
2q0	(58.4)	(139.1)	—	—	—	—	—
5q0	(58.4)	(139.1)	—	—	—	—	—
1q1	(13.4)	(37.0)	—	—	—	—	—
3q2	(0.0)	(0.0)	—	—	—	—	—
4q1	(13.4)	(37.0)	—	—	—	—	—

PORTUGAL 1979-80: A4. Probabilities of infant and child death by period and birth order

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
First births							
NN	22.3	21.0	32.1	22.7	37.2	(38.7)	(0.0)
P-NN	8.4	7.7	21.6	31.3	33.7	(57.4)	(0.0)
1q0	30.7	28.8	53.7	53.9	70.8	(96.0)	(0.0)
2q0	32.7	29.8	58.8	59.3	(74.7)	(113.2)	(0.0)
5q0	34.2	32.0	62.2	67.8	(82.1)	(121.8)	—
1q1	2.1	1.1	5.4	5.7	(4.1)	(18.9)	(0.0)
3q2	1.6	2.3	3.6	9.1	(8.0)	(9.7)	—
4q1	3.6	3.3	9.0	14.7	(12.1)	(28.5)	—
Second and third births							
NN	22.6	14.5	20.1	32.3	38.8	(43.5)	(0.0)
P-NN	12.1	27.6	23.5	32.6	(44.7)	(22.8)	—
1q0	34.6	42.1	43.6	64.9	(83.5)	(66.2)	—
2q0	34.6	45.4	48.8	71.3	(99.2)	(85.5)	—
5q0	36.0	47.2	50.7	80.6	(102.5)	(85.5)	—
1q1	0.0	3.4	5.4	6.8	(17.1)	(20.6)	—
3q2	1.4	1.9	2.1	10.0	(3.7)	(0.0)	—
4q1	1.4	5.3	7.4	16.8	(20.8)	(20.6)	—
Fourth to sixth births							
NN	(20.5)	(40.8)	(17.9)	(43.4)	(19.7)	(0.0)	—
P-NN	(6.5)	(30.7)	(27.6)	(42.2)	(26.9)	(0.0)	—
1q0	(26.9)	(71.5)	(45.5)	(90.5)	(46.6)	(0.0)	—
2q0	(29.9)	(82.5)	(46.6)	(116.8)	(55.6)	(0.0)	—
5q0	(29.9)	(89.4)	(57.5)	(132.1)	(55.6)	—	—
1q1	(3.1)	(11.9)	(1.2)	(28.9)	(9.4)	(0.0)	—
3q2	(0.0)	(7.5)	(11.4)	(17.3)	(0.0)	—	—
4q1	(3.1)	(19.3)	(12.6)	(45.7)	(9.4)	—	—
Seventh or higher order births							
NN	(42.3)	(31.0)	(60.2)	(94.7)	(200.0)	—	—
P-NN	(13.3)	(52.2)	(38.7)	(0.0)	(0.0)	—	—
1q0	(55.5)	(83.2)	(98.9)	(94.7)	(200.0)	—	—
2q0	(64.3)	(91.8)	(151.9)	(207.9)	(200.0)	—	—
5q0	(69.4)	(91.8)	(151.9)	(207.9)	—	—	—
1q1	(9.3)	(9.4)	(58.8)	(125.0)	(0.0)	—	—
3q2	(5.4)	(0.0)	(0.0)	(0.0)	—	—	—
4q1	(14.7)	(9.4)	(58.8)	(125.0)	—	—	—

PORTUGAL 1979-80: A5. Probabilities of infant and child death by period and previous birth interval

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Less than 24 months—ALL intervals							
NN	(32.7)	31.9	29.9	54.5	(39.7)	(55.6)	(0.0)
P-NN	(20.1)	54.7	26.0	42.9	(54.8)	(33.9)	—
1q0	(52.8)	86.5	55.9	97.3	(94.5)	(89.4)	—
2q0	(52.8)	95.9	68.8	(115.8)	(106.8)	(116.6)	—
5q0	(55.6)	99.4	72.7	(124.3)	(112.2)	(116.6)	—
1q1	(0.0)	10.2	13.7	(20.5)	(13.5)	(29.9)	—
3q2	(3.0)	3.9	4.2	(9.6)	(6.1)	(0.0)	—
4q1	(3.0)	14.1	17.8	(29.8)	(19.5)	(29.9)	—
Less than 24 months—SURVIVING intervals only							
NN	(31.3)	17.4	22.0	(55.3)	(32.1)	(50.8)	(0.0)
P-NN	(17.5)	59.5	29.1	(36.4)	(54.8)	(41.9)	—
1q0	(48.8)	76.9	51.1	(91.7)	(86.9)	(92.7)	—
2q0	(48.8)	84.8	65.0	(113.0)	(101.6)	(126.9)	—
5q0	(51.8)	88.8	(69.5)	(120.3)	(108.1)	(126.9)	—
1q1	(0.0)	8.5	14.6	(23.5)	(16.0)	(37.7)	—
3q2	(3.2)	4.4	(4.8)	(8.2)	(7.3)	(0.0)	—
4q1	(3.2)	12.8	(19.3)	(31.5)	(23.2)	(37.7)	—
24 to 47 months							
NN	17.9	13.7	6.6	(29.1)	(18.5)	(0.0)	—
P-NN	2.9	19.4	25.6	(27.0)	(19.4)	(0.0)	—
1q0	20.8	33.0	32.1	(56.1)	(37.9)	(0.0)	—
2q0	25.5	35.6	36.4	(64.0)	(53.5)	(0.0)	—
5q0	25.5	35.6	(41.3)	(80.9)	(53.5)	(0.0)	—
1q1	4.8	2.6	4.4	(8.4)	(16.2)	(0.0)	—
3q2	0.0	0.0	(5.1)	(18.0)	(0.0)	(0.0)	—
4q1	4.8	2.6	(9.5)	(26.3)	(16.2)	(0.0)	—
48 or more months							
NN	18.6	11.6	(29.1)	(14.0)	(17.9)	(0.0)	—
P-NN	8.3	(12.7)	(19.2)	(19.7)	(37.1)	(0.0)	—
1q0	26.9	(24.2)	(48.3)	(33.6)	(54.9)	(0.0)	—
2q0	26.9	(28.5)	(48.3)	(46.4)	(89.3)	(0.0)	—
5q0	28.6	(33.3)	(51.7)	(46.4)	(89.3)	—	—
1q1	0.0	(4.4)	(0.0)	(13.2)	(36.4)	(0.0)	—
3q2	1.8	(4.9)	(3.5)	(0.0)	(0.0)	—	—
4q1	1.8	(9.3)	(3.5)	(13.2)	(36.4)	—	—

PORTUGAL 1979-80: A6. Probabilities of infant and child death by period and whether multiple birth

Measure	Years prior to survey 0-4	5-9	10-14	15-19	20-24	25-29	30-34
Multiple births							
NN	(70.2)	(141.0)	(96.2)	(105.3)	(461.5)	(500.0)	—
P-NN	(32.5)	(42.8)	(57.1)	(47.1)	(179.5)	(0.0)	—
1q0	(102.7)	(183.8)	(153.3)	(152.4)	(641.0)	(500.0)	—
2q0	(102.7)	(198.0)	(208.8)	(152.4)	(641.0)	(500.0)	—
5q0	(102.7)	(211.8)	(208.8)	(152.4)	(641.0)	—	—
1q1	(0.0)	(17.4)	(65.6)	(0.0)	(0.0)	(0.0)	—
3q2	(0.0)	(17.2)	(0.0)	(0.0)	(0.0)	—	—
4q1	(0.0)	(34.3)	(65.6)	(0.0)	(0.0)	—	—
Single births							
NN	22.2	18.9	24.5	31.4	32.3	(37.3)	(0.0)
P-NN	9.5	22.4	23.6	32.7	36.2	(46.8)	(0.0)
1q0	31.7	41.2	48.1	64.1	68.5	(84.1)	(0.0)
2q0	33.5	45.2	54.0	74.2	77.4	(101.8)	(0.0)
5q0	35.0	47.8	57.8	83.7	(83.1)	(108.8)	—
1q1	1.8	4.2	6.2	10.8	9.6	(19.3)	(0.0)
3q2	1.6	2.6	4.1	10.2	(6.2)	(7.8)	—
4q1	3.4	6.8	10.2	20.9	(15.7)	(27.0)	—

PORTUGAL 1979-80: A7. Probabilities of infant and child death by calendar years and sex of child

Measure	Calendar years 1975-9	1970-4	1965-9	1960-4	1955-9	1950-4	1945-9
Males							
NN	28.7	31.5	29.4	32.1	36.0	(49.3)	(66.7)
P-NN	11.8	23.5	26.4	38.7	49.0	(44.9)	(0.0)
1q0	40.5	54.9	55.8	70.8	85.0	(94.2)	(66.7)
2q0	44.7	59.9	61.6	84.0	(97.0)	(132.7)	(66.7)
5q0	45.2	62.1	65.8	90.7	(99.8)	(148.4)	—
1q1	4.3	5.2	6.1	14.2	(13.1)	(42.6)	(0.0)
3q2	0.6	2.4	4.5	7.4	(3.1)	(18.0)	—
4q1	4.9	7.6	10.5	21.5	(16.1)	(59.8)	—
Females							
NN	21.6	11.7	23.9	34.1	35.6	(26.8)	(0.0)
P-NN	9.6	21.4	22.2	26.7	(30.7)	(46.8)	(0.0)
1q0	31.2	33.1	46.1	60.8	(66.3)	(73.6)	(0.0)
2q0	31.8	37.6	53.1	69.5	(73.0)	(73.6)	(0.0)
5q0	35.4	40.5	56.0	82.7	(79.5)	(73.6)	—
1q1	0.6	4.6	7.4	9.2	(7.2)	(0.0)	(0.0)
3q2	3.7	3.0	3.1	14.2	(7.0)	(0.0)	—
4q1	4.3	7.6	10.4	23.3	(14.2)	(0.0)	—
Both sexes							
NN	25.4	22.1	26.9	33.1	35.8	(37.6)	(37.0)
P-NN	10.8	22.5	24.5	32.9	40.3	(46.1)	(0.0)
1q0	36.2	44.5	51.4	66.0	76.1	(83.7)	(37.0)
2q0	38.7	49.2	57.7	76.9	85.5	(102.3)	(37.0)
5q0	40.7	51.8	61.3	86.9	(90.1)	(109.9)	—
1q1	2.6	4.9	6.7	11.8	10.2	(20.3)	(0.0)
3q2	2.1	2.7	3.8	10.8	(5.1)	(8.5)	—
4q1	4.7	7.6	10.5	22.4	(15.2)	(28.6)	—

PORTUGAL 1979-80: A8. Probabilities of infant and child death by cohort of birth

Measure	Year of birth prior to survey 1-4	5-9	10-14	15-19	20-24	25-29	30-34
Both sexes							
NN	24.6	21.7	25.9	31.4	37.8	39.7	(0.0)
P-NN	9.3	21.7	23.2	33.2	36.2	49.6	(0.0)
1q0	33.9	43.3	49.1	64.6	74.1	89.3	(0.0)
2q0	40.0*	47.0	53.3	75.3	81.2	106.7	(0.0)
5q0	--	48.8	57.1	79.5	90.6	114.1	(0.0)
1q1	6.3*	3.8	4.4	11.5	7.7	19.1	(0.0)
3q2	--	1.9	4.0	4.6	10.3	8.3	(0.0)
4q1	--	5.8	8.4	16.0	17.9	27.2	(0.0)

* Two to four years prior to survey