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Morocco

National Survey on Family Planning, Fertility and Health

1987

Summary Report

Service des Etudes et de l'Information Sanitaire
Ministère de la Santé Publique
Rabat, Maroc

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This report summarizes the findings of the 1987 National Survey on Family Planning, Fertility and Health of Morocco (ENPS), conducted by the Service des Etudes et de l'Information Sanitaire (SEIS), Ministère de la Santé Publique. The Institute for Resource Development provided funding and technical assistance. Editorial and production support for this report was provided by the IMPACT project of the Population Reference Bureau.

The Morocco survey is part of the worldwide Demographic and Health Surveys (DHS) Program, which is designed to collect data on fertility, family planning, and maternal and child health. Additional information on the Morocco survey may be obtained from: Service des Etudes et de l'Information Sanitaire, Ministère de la Santé Publique, Rabat, Maroc. Additional information about the DHS program may be obtained by writing to: DHS, Institute for Resource Development/Macro Systems, 8850 Stanford Boulevard, Suite 4000, Columbia, MD 21045, U.S.A. (Telex 87775).

September 1989

EXECUTIVE SUMMARY

The 1987 National Survey of Family Planning, Fertility and Health of Morocco (l'Enquête Nationale sur la Planification Familiale, la Fécondité et la Santé de la Population au Maroc) (ENPS) documents several important trends since 1980:

- Fertility rates have declined from an average of 5.8 children per woman to 4.6;
- Child mortality rates have declined moderately;
- Women under age 30 are marrying later and having fewer children than did older women; and
- Contraceptive use has increased by about 85 percent between 1980 and 1987, from 19 percent to 36 percent of married women using contraception.

Nevertheless, fertility and child mortality levels remain high.

Major survey findings include

- Child Mortality: One in ten children dies before his or her fifth birthday. Death rates are even higher among rural children.
- Maternity Care: Three in four deliveries take place without assistance from trained medical personnel, and most women receive no medical care during pregnancy.

At current rates, Moroccan women will give birth to an average of almost five children each during their lives.

- Child Health: Many children show signs of chronic malnutrition. Diarrhea is common in both urban and

rural areas, and oral rehydration therapy, an effective and inexpensive treatment, is not widely used. Most children have been immunized at least once, but many are not protected against all six major childhood diseases.

- Unwanted Fertility: Women have more children than they want. If all unwanted births could be prevented through use of family planning, the fertility rate would be reduced by almost one child per woman.
- Breastfeeding: Most women breastfeed for at least one year, which contributes to prolonged natural infecundity following childbirth and to improved nutrition and health among infants.

More than one-third of married Moroccan women are using contraception, and most use the Pill. Government dispensaries and home visitors are major providers of family planning services. Women perceive side effects, contraceptive efficacy, and ease of use to be potential problems associated with contraception, suggesting that they could benefit from more information on contraceptive methods. Most women consider information on family planning in the mass media to be acceptable.

The ENPS reveals a large potential need for family planning services. Forty-six percent of married women are estimated to be in need of family planning services because they are fertile, not contracepting and do not want more children or want to delay the

next birth by at least two years. However, fewer than half of these women say they intend to use contraception.

The ENPS found that child mortality levels are higher among children who:

- Live in rural areas;
- Have mothers with no education;
- Are born less than two years after a previous birth; or
- Have mothers younger than age 20.

The ENPS findings show some progress in improving child survival but also indicate several areas in which expanded services and public education programs are needed:

- Only about half of the children aged 12-23 months have verifiable health cards.
- Immunization coverage is widespread but far from complete.
- Nearly half of the children who were reported to have diarrhea in the two weeks before the survey received no treatment.
- One in four children under age 3 shows signs of chronic malnutrition.

BACKGROUND

The 1987 National Survey of Family Planning, Fertility and Health of Morocco (ENPS) provides planners and policymakers with essential information on fertility, infant and child mortality,

maternal and child health care, and family planning and related factors. It was conducted by the Service des Etudes et de l'Information Sanitaire of the Ministry of Public Health. A total of 5,982 women aged 15-49 were interviewed between May and July 1987 in a national-level sample. Interviews with mothers provided health-related information for 6,053 children under age 5. Height and weight measures were taken and analyzed for 3,292 children aged 0-36 months.

FERTILITY

Fertility has declined considerably during the 1980s in Morocco. Fertility rates declined by 21 percent between the 1979-80 (Enquête Nationale sur la Fécondité et la Planification Familiale au Maroc) and 1987 surveys, from an average of 5.8 children per woman to 4.6 (see Figure 1, Total Fertility Rate). Most of this decline is due to fewer births to women under age 30.

The greatest differences in fertility are between educational groups. At current fertility levels, women with no education will have more than twice as many children as those with a secondary or higher education (5.2 children per woman compared with 2.3). Similarly, rural women will have nearly twice as many children as urban women (5.9 compared with 3.2).

Factors Affecting Fertility

The survey findings highlight several factors that influence

fertility levels and trends in Morocco, including: 1) age at marriage; 2) the mother's age at the first birth; 3) breastfeeding and natural infecundity following birth; 4) fertility desires; and 5) contraceptive use.

Age at Marriage

One factor contributing to the fertility decline is that younger women are marrying later, thereby postponing their first birth. The ENPS found that women who marry later have fewer children than those who marry earlier. More than three-quarters of the women now aged 40-44 were married by age 19, compared with only half of those now 25-29 (see Figure 2). Women who have attended secondary school marry about seven years later than those who have no education.

Age at First Birth

Early childbearing contributes to high fertility and is often associated with economic, social and health problems. The

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Nearly three in 10 Moroccan women had their first birth during their teenage years.

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average age of the mother at her first birth has risen in Morocco. Women now age 40-49 first gave birth at age 20 on average, compared with women now age 25-29 who had their first child at age 22. However, nearly three in 10 Moroccan women had their first birth during their teenage years.

Breastfeeding and Postpartum Infecundity

Breastfeeding extends the period of natural infecundity following a birth, during which a woman cannot conceive. Moroccan women breastfeed for an average of 14 months. On average, the period of postpartum infecundity lasts for nearly nine months. The duration of breastfeeding is lower among urban and educated women. Women living in rural areas breastfeed five months longer than urban women, while women with no education breastfeed twice as long as women with a secondary or higher education (see Figure 3).

Fertility Desires

Moroccan women are opting for smaller families. The survey found that more than two in three married women would like to limit or space their births. Nearly half (46%) of the married women say they want no more children, an additional 2 percent have been sterilized, and about one in five (22%) would like to delay her next birth at least two years (see Figure 4).

When asked how many children they would prefer to have, one in four women gave non-numeric answers such as "that depends on God." Women giving a numeric response preferred an average of 3.7 children--about one child fewer than they are now having. Younger women, those living in urban areas, and those with a primary-level or higher education want fewer children than other women (see Figure 5).

More than two in three married women would like to limit or space their births.

Enabling women to achieve their preferences through use of family planning would reduce the number of unwanted and mistimed births. For example, mothers report that in the five years before the survey almost one in six births were unwanted; one in five was wanted later. If women had only the births they wanted, the fertility rate would be 19 percent lower.

Contraceptive failure appears to be common. Among all births in the five years before the survey, one in six mothers reported that they were using a contraceptive method at the time they became pregnant. Whether these pregnancies resulted from method failure or incorrect usage cannot be determined from this data, but may be an issue for program administrators to investigate.

FAMILY PLANNING

Knowledge of Contraception

Nearly all married women (98%) have heard of at least one method of contraception, and most women (94%) know where to obtain information or services for at least one method. Among married women, the most widely recognized modern methods are the Pill (97%), IUD (80%), female sterilization (77%), condom (60%), and injection (56%). Fewer than 5 percent of married women have heard of male sterilization. Three in four married women have

heard of a traditional method. Among traditional methods, those most often recognized are periodic abstinence (52%) and withdrawal (47%).

Contraceptive Use

Nearly three in five married women have used a contraceptive method at some time, and 36 percent are currently using contraception, predominantly modern methods (see Figure 6). Twenty-three percent of married women are using the Pill, three percent use the IUD and two percent have been sterilized. Almost four times as many women use the Pill as all other modern methods combined.

Contraceptive use varies considerably by place of residence and educational level. More than twice as many married women living in urban areas use contraception, compared with rural

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More than one-third of the married women are using contraception, mainly the Pill.

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women (see Figure 7). Similarly, nearly twice as many married women who have attended primary school use contraception, compared with uneducated women. Eighty-three percent of those interviewed had never attended school.

Since the 1979-80 survey, contraceptive use has increased by 85 percent, but use is still concentrated among the urban and educated women.

Family Planning Services

The majority of women using contraception obtained their method most recently from public sector sources, mainly dispensaries and home visitors (agents of the Visites à Domicile et de Motivation Systematique program). More than six in ten women using the Pill cited these same sources. About one in 10 women using contraception obtained her method from pharmacies. Other sources include private physicians, midwives, clinics, and the Moroccan Family Planning Association (AMPF) (Association Marocaine de Planification Familiale).

Perception of Problems with Contraception

Women who recognized a contraceptive method were asked to name the major problem, if any, regarding its use. Almost three in ten women said there is no problem with use of the Pill and more than half said there is no problem with female sterilization. However, more than half of the women mentioned side effects associated with use of the Pill, and nearly one-third cited side effects in relation to the IUD. Contraceptive failure or ineffectiveness was mentioned as a problem with several methods, including periodic abstinence, withdrawal, condoms and the IUD. Women also said that the condom, withdrawal and periodic abstinence are difficult to use.

Media Exposure

Only one in four married women said that they had seen a

poster or heard a mention of family planning on radio or television, in youth meetings or at the Women's Union (Union des Femmes) during the month prior to the survey. One in five women had heard a family planning message more than once. Women living in urban areas or having a primary-level or higher education were more likely to report seeing or hearing family planning messages than rural or uneducated women. Despite the lack of recent exposure to family planning information, more than three in four married women considered mass media coverage of family planning to be acceptable.

Potential Demand for Family Planning Services

Nearly half (46%) of all married women are estimated to be in need of family planning services because they are fertile, not

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Nearly half of all married women are estimated to be at risk of an unintended pregnancy, and therefore are in need of family planning services.

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contracepting and do not want to become pregnant soon. Fifty-four percent of these women do not want any more children and 46 percent would like to delay their next pregnancy for at least two years. However, only two in five of the women estimated to be in need of family planning services plan to use such services in the future.

Of those married women not currently using a method of contraception only about one-third say they intend to use a

method in the future. Sixty percent of these women say they would use the Pill, while 12 percent would choose the IUD and a similar proportion would be sterilized.

MATERNAL AND CHILD HEALTH

Infant and child mortality rates remain high, although they have decreased since the late 1970s (see Figure 8). Today, one in 10 children dies before his or her fifth birthday.

One in 10 children dies before his or her fifth birthday.

The ENPS findings highlight a number of factors that directly influence child survival:

- Place of Residence: Children living in rural areas have a 38 percent higher risk of dying before their first birthday and a 69 percent higher risk of dying before their fifth birthday, compared with urban children. Nearly one in 10 rural infants dies before his or her first birthday.
- Mother's Education: Children born to mothers with no education are nearly twice as likely to die before age 5 as those born to women who have attended primary school.
- Birth Spacing: For children born less than two years after a previous birth, the risk of dying before age 1 is more than three times that of children born four or more years after a previous birth (see Figure 9).

- Mother's Age: Children born to mothers under age 20 have a 55 percent greater risk of dying before their first birthday than those whose mothers are 20 or older.

Maternity Care

In Morocco, the role of trained health personnel in prenatal care and childbirth is limited. Most women receive no prenatal care whatsoever and are assisted at childbirth by traditional midwives or relatives with no training in safe birth practices.

The care a woman receives during pregnancy can be critical to her child's chances of survival. Mothers of three in four children under age 5 had no prenatal care. The lack of prenatal care is especially serious in rural areas, where mothers of 87 percent of children under age 5 had no prenatal care, compared with mothers of half of the children in urban areas. Physicians and nurses are the main providers of prenatal care, mostly to urban women.

Childbirth complications are a leading cause of maternal and child deaths in most countries and often cause chronic disabilities. Therefore, the lack of trained assistance during childbirth is a major concern among health professionals. Mothers of nearly three in five Moroccan children under age 5 were assisted at delivery by traditional midwives (known as qablas)(see Figure 10). One in six births were assisted by others (relatives or neighbors) with neither the medical training

of health personnel nor the experience of the traditional midwife.

Mothers of nearly three in four Moroccan children under age 5 gave birth without trained medical assistance.

Major differences exist between rural areas, where only one birth in 10 of children under age 5 was assisted by trained personnel, and urban areas, where six births in ten had such assistance. Women with a primary-level or higher education are more than three times as likely to be assisted by trained personnel as those with no education.

Breastfeeding and Infant Health

In addition to providing the mother some protection against another pregnancy, breastfeeding is important to child health and development. Breastmilk is the ideal source of nutrition during the first year of life and also contains antibodies that help protect the child against disease. Exclusive breastfeeding for the first 4-6 months contributes significantly to the infant's health.

Eight in 10 Moroccan infants are breastfed through their first five months of life; half are breastfed through 15 months of age.

Immunization

Immunization against the six major childhood diseases--

tuberculosis, diphtheria, whooping cough, tetanus, poliomyelitis and measles--is a key intervention to improve child survival rates. According to the mother's report and health cards, 84 percent of children age 12-23 months have been vaccinated at least once. However, immunization status for specific diseases could be verified only for about 51 percent of these children -- those whose mothers could show a health card.

Among children aged 12-23 months with a health card, seven in 10 are immunized against all six major diseases (see Figure 11). Nearly two-thirds have received two doses of Vitamin D to prevent rickets. Most children aged 12-23 months with health cards are immunized against tuberculosis, but one in five fails to complete the necessary immunizations to be protected against diphtheria, whooping cough, tetanus and polio.

Diarrhea

Diarrhea, a leading cause of child mortality, is common in Morocco. Mothers reported that more than one in four children under age 5 had had diarrhea in the two weeks prior to the survey. Half of these children were between 6 and 23 months of age.

Among children having diarrhea, nearly half received no treatment.

Among children having diarrhea, nearly half (45%) received no treatment (see Figure 12). Most of those treated received

rice water, broth, herbal medicines, or pharmaceutical products. Only about 16 percent of the children were treated with oral rehydration therapy (ORT), an effective and inexpensive treatment for dehydration, which is often the cause of death among children with diarrhea.

Nutritional Status of Children

As part of the ENPS, children aged 0-36 months were weighed and measured to assess their nutritional status. The study found that one in four children aged 0-36 months is short in relation to his or her age, compared with the international reference population. This finding indicates that chronic malnutrition is a significant problem. Chronic malnutrition is three times higher among children aged 1-3 years than among infants less than one year old, probably due to the nutritional benefits of

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One in four children under age 3 is short in relation to his or her age, a sign of chronic malnutrition.

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breastfeeding. Children living in rural areas are almost twice as likely to be malnourished as those living in urban areas (see Figure 13). Children whose mothers have no education are almost three times more likely to be malnourished than those whose mothers have attended secondary school. Nonetheless, middle class children are similar to the international reference population in their development.

CONCLUSIONS

The results of the 1987 National Survey of Family Planning, Fertility and Health of Morocco document a need for expanded health and family planning services and for greater public education on these topics. Rural women and children as well as women with little or no education are particularly disadvantaged in terms of health status and use of health services. Changes in the educational status of Moroccan women will affect future demand for family planning and health services. Increasing female school attendance rates may well be one of the most important health and fertility interventions to be implemented by government leaders.

Maternal and child health remains a serious problem. Most mothers receive no trained medical attention during pregnancy and childbirth, and many children receive no treatment at all for diarrhea. The ENPS findings suggest a number of specific policies and programs that could have a major impact on child survival and women's health:

- Providing more extensive medical care during pregnancy and childbirth and training traditional midwives, especially to identify and assist women with high-risk pregnancies;
- Educating parents about the need for childhood immunizations and increasing access to immunization programs;
- Promoting improved child nutrition through growth

monitoring, nutrition education and food distribution programs;

- Urging young women to delay birth of their first child until age 20 or later;
- Educating parents on the use of oral rehydration therapy to counter the dehydrating effects of diarrhea; and
- Educating parents on the benefits of child spacing, the availability of family planning services, and the appropriate choice and use of a contraceptive method.

A concerted effort will be needed to reduce maternal and child mortality levels substantially.

The ENPS findings suggest that women perceive method failure, side effects, menstrual disturbances, and difficulty of use as major problems associated with contraception. Contraceptive failure, perhaps due to incorrect method usage, is common, accounting for one in six births in the five years before the survey. Program planners need to address these issues through strategies such as:

1. Communication programs to publicize service locations and provide accurate information on contraceptive methods, including their advantages and disadvantages, potential side effects, correct use, and the relative effectiveness of different methods;
2. Improvement and expansion of family planning services to increase access to the most effective methods; and

3. A greater emphasis on counseling to ensure correct use and appropriate follow-up care.

Women should have access to a wide range of contraceptive methods and should be encouraged to return to the service provider if they are having problems with a method.

FACT SHEET

Recensement de la Population et de l'Habitat, 1982, et les enquêtes menées par le Ministère de la Santé et par le Ministère du Plan

Population Size (millions) (1982)	**20.4**
Population Growth Rate (percent) (1971-82)	**2.6**
Population Doubling Time (years) (1987)	**27**
Birth Rate (per 1000 population) (1987 estimate)	**37.2**
Death Rate (per 1000 population) (1987 estimate)	**10**

Morocco, National Survey on Family Planning, Fertility and Health, 1987

Sample Population	
Women 15-49	5,982
Children under 5 (based on mothers' reports)	6,053
Background Characteristics	
Percent urban	42.7
Percent with more than primary education[1]	7.1
Marriage and Other Fertility Determinants	
Percent currently married	55.6
Percent ever-married	61.2
Median age at first marriage for women 25-49	18.5
Median age at first birth for women 25-49	21.2
Mean length of breastfeeding (in months)[2]	14.4
Mean length of postpartum amenorrhea (in months)[2]	8.7
Fertility	
Total fertility rate (projected completed family size)[3]	4.6
Mean number of children ever born to women 40-49	7.1
Percent of currently married women who are pregnant	12.7
Desire for Children	
Percent of currently married women:	
Wanting no more children (excluding sterilized women)	45.6
Wanting to delay next birth at least 2 years	22.0
Mean ideal number of children for women 15-49	3.7
Percent of unwanted births[4]	17.6
Percent of mistimed births[5]	22.4

Knowledge and Use of Family Planning	
Percent of currently married women:	
Knowing any method	97.8
Knowing source for any method	94.3
Ever using any method	58.9
Currently using any method	35.9
Pill	22.9
IUD	2.9
Injection	0.3
Vaginal methods	0.1
Condom	0.5
Female sterilization	2.2
Male sterilization	0.0
Periodic abstinence	2.3
Withdrawal	3.1
Other methods	1.5
Percent of contraceptors obtaining modern method from:	
Government hospital/clinic	40.6
Field worker/mobile van	20.6
Pharmacy	9.4
Private doctor/midwife/clinic	5.5
Association Marocaine de Planification Familiale	1.1
Other	16.4
Mortality and Health	
Infant mortality rate[6]	73
Under five mortality rate[6]	102
Percent of mothers of recent births:[7]	
Received prenatal care during pregnancy	24.8
Assisted at delivery by doctor or trained nurse/midwife	26.0
Percent of children aged 0-1 month still breastfed	90.4
Percent of children aged 4-5 months still breastfed	81.3
Percent of children aged 10-11 months still breastfed	70.3
Percent of children under five years of age with health cards	41.5
Percent of children 12-23 months of age vaccinated according to a health card or mother's report	83.9
Percent of children 12-23 months of age with health cards	50.5
Percent of children 12-23 months of age with health cards:	
Vaccinated against BCG	97.1
Vaccinated against DPT and polio (3 doses)	79.9
Vaccinated against measles	76.1
Vaccinated against all six diseases	69.8
Received vitamin D[2] to prevent rickets (2 doses)	63.1
Percent of children under five years of age with diarrhea[8]	28.9
Percent of children with diarrhea treated with:	
Any treatment	55.2

Oral rehydration therapy	16.0
Percent of children aged 0-36 months considered to be moderately or severely chronically malnourished, based on height for age	25.5
Percent of children aged 0-36 months considered to be moderately or severely acutely malnourished, based on weight for height	3.7

[1] 6 or more years of education

[2] Current status estimate based on births within 36 months of the survey

[3] Based on births to women 15-49 years during the period 0-4 years before the survey

[4] Percent of births in the 12-month period before the survey which were unwanted

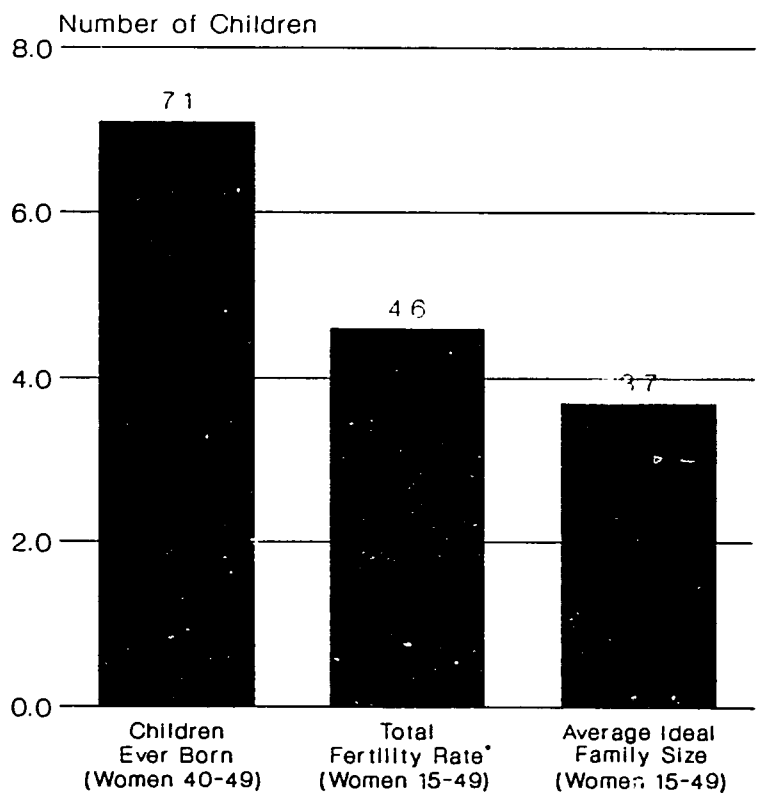
[5] Percent of births in the 12-month period before the survey which were wanted later

[6] Rates are for the five-year period preceding the survey (approximately 1982-1986)

[7] Based on births occurring during the five years before the survey

[8] Based on the youngest children, age 5 or less, reported by the mothers as having diarrhea during the two weeks before the survey

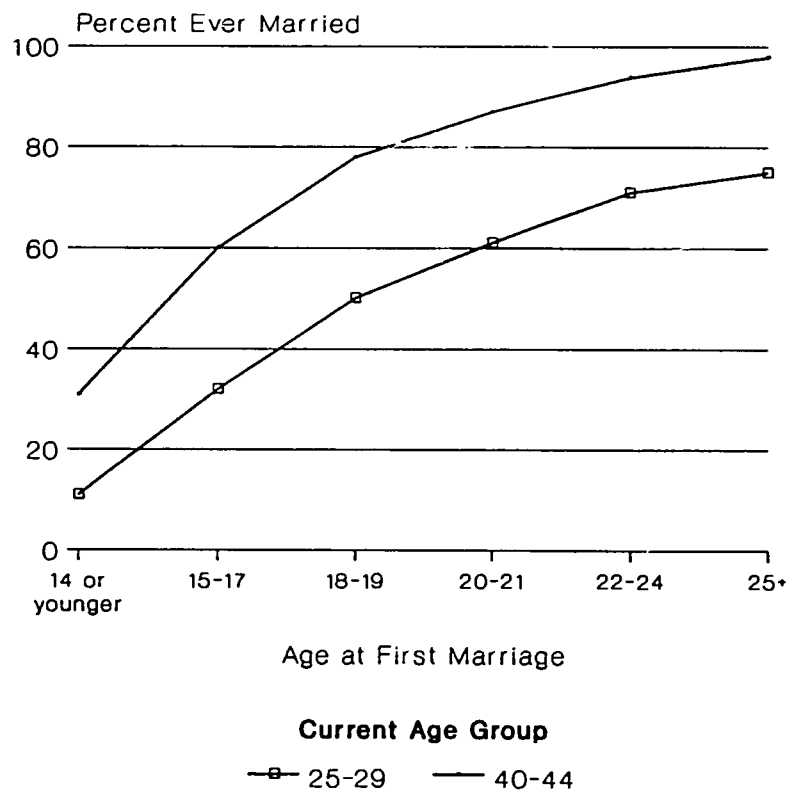
Figure 1
Past and Current Fertility and Ideal Family Size



* Projected completed family size

Morocco ENPS 1987

Figure 2
Age at First Marriage



Morocco ENPS 1987

Figure 3
Breastfeeding Duration

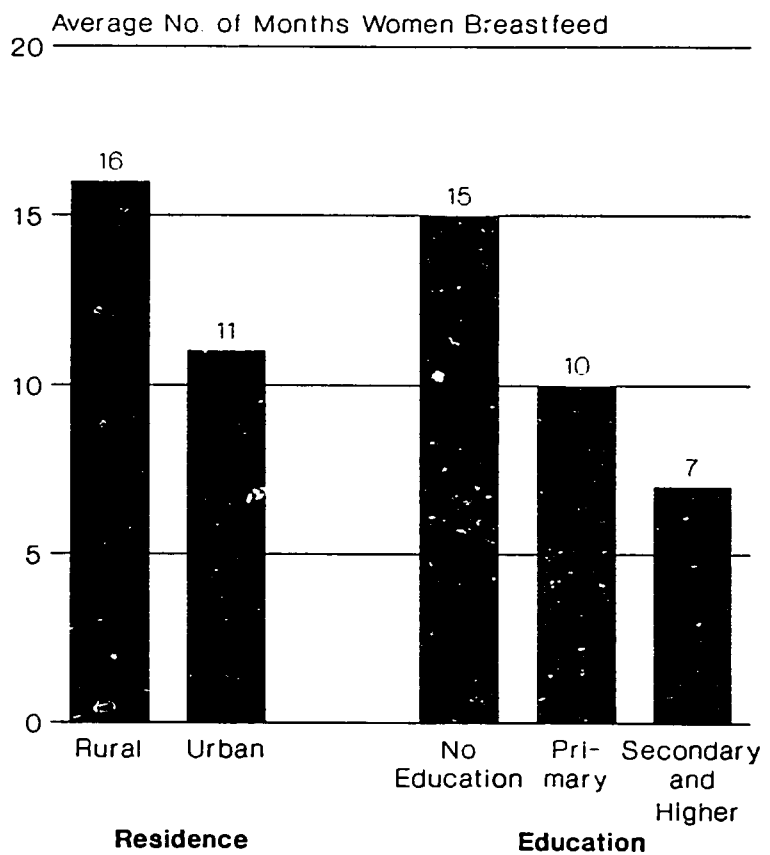


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Figure 4
Reproductive Preferences
(Married Women 15-49)

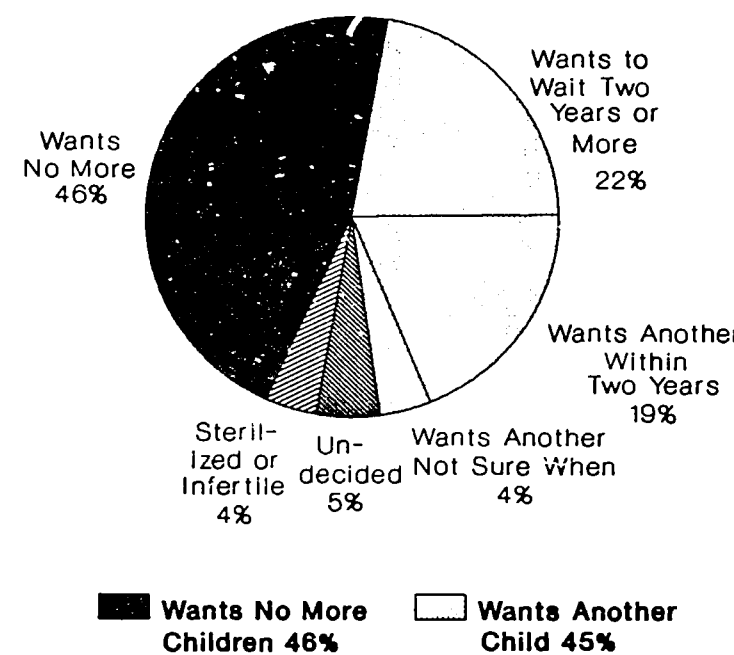

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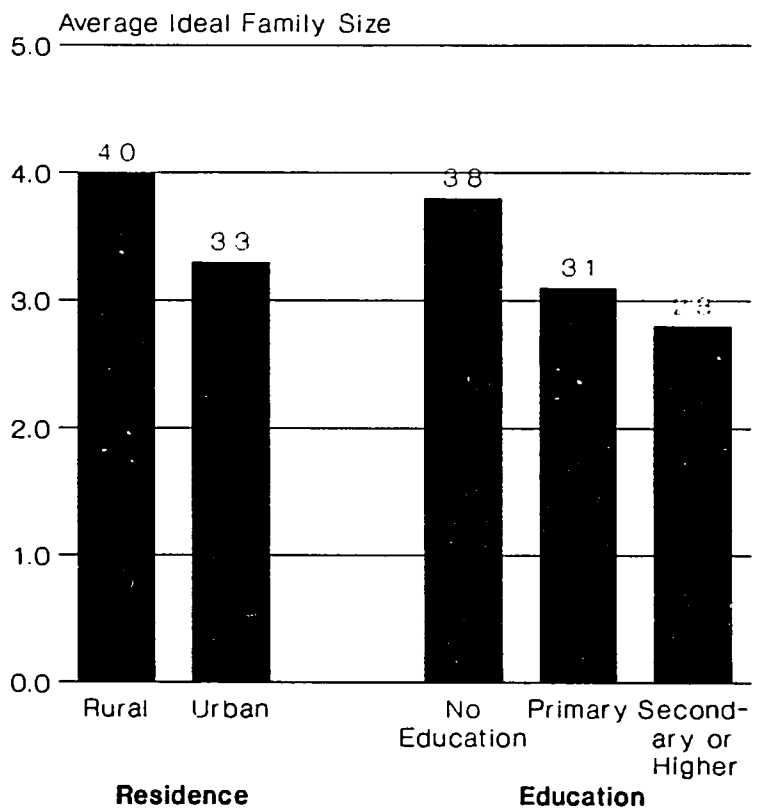
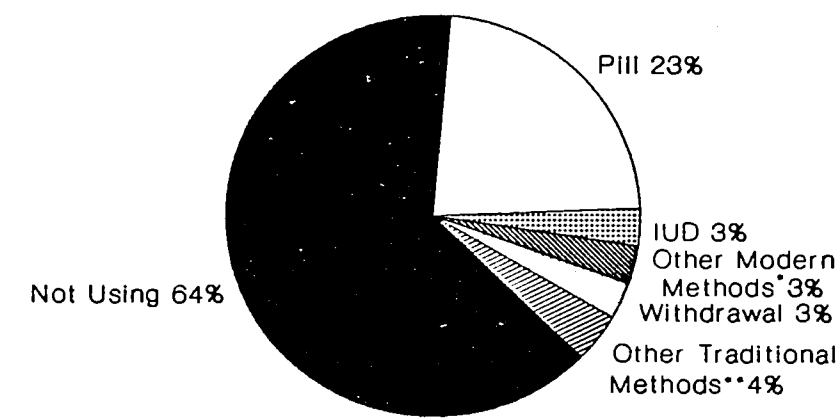
Figure 5
Desired Family Size by Place of Residence and Education



Morocco ENPS 1987

Figure 6
Current Use of Contraception
(Currently Married Women 15-49)



* Includes female sterilization, condom, injection and vaginal methods
** Includes periodic and prolonged abstinence, vaginal douche and other traditional methods

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Figure 7
Current Contraceptive Use by Place of Residence and Education
(Currently Married Women 15-49)

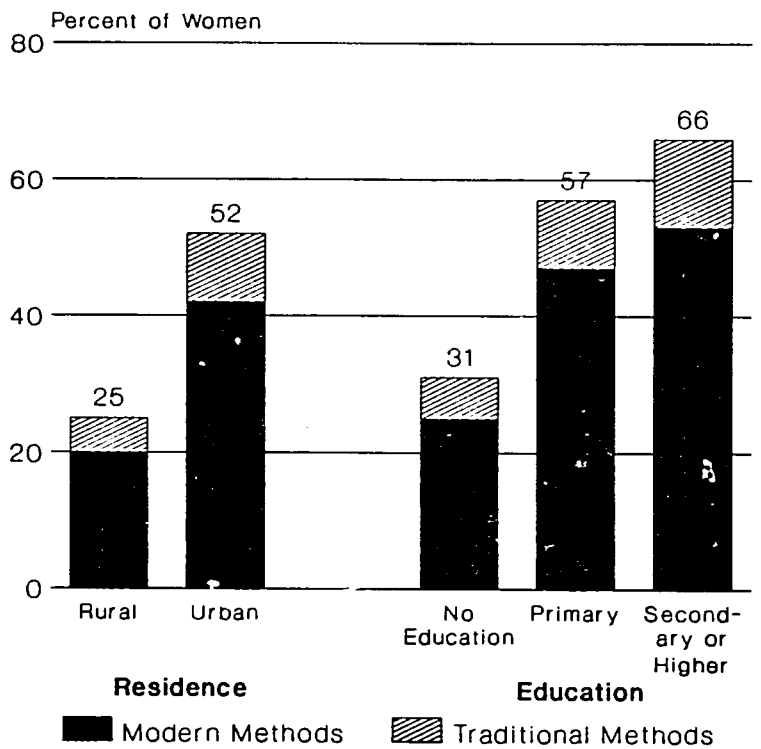

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Figure 8
Trends in Infant and Child Mortality

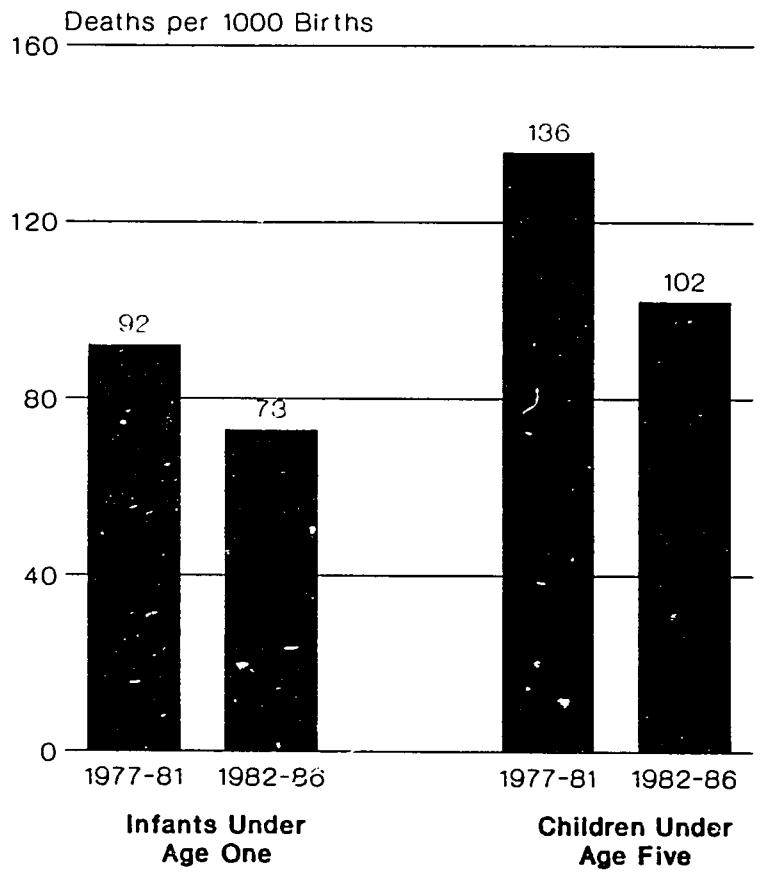

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Figure 9
Birthspacing and Infant Mortality

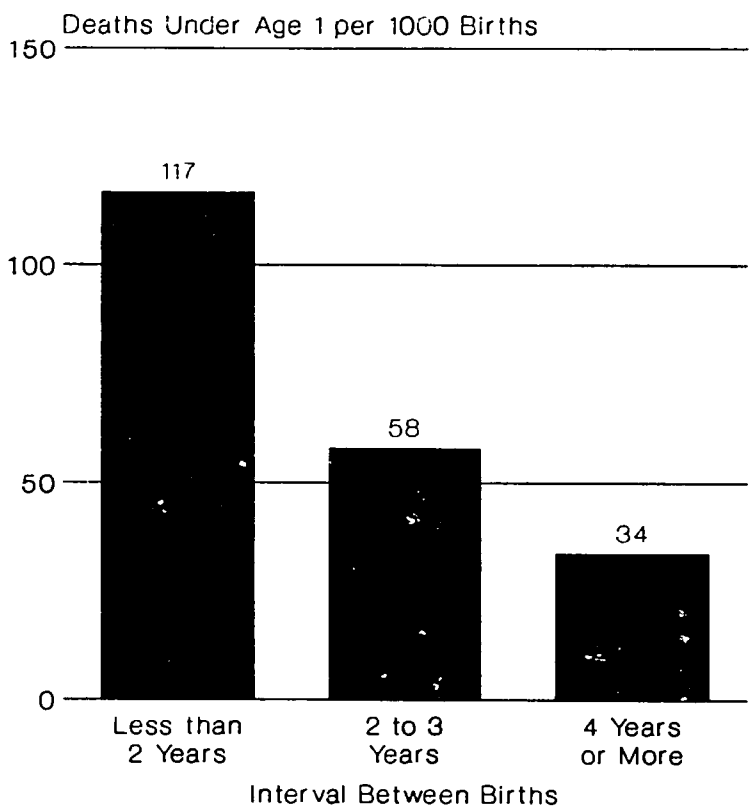

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Figure 10
Assistance During Childbirth
(Live births during the 5 years prior to the survey)

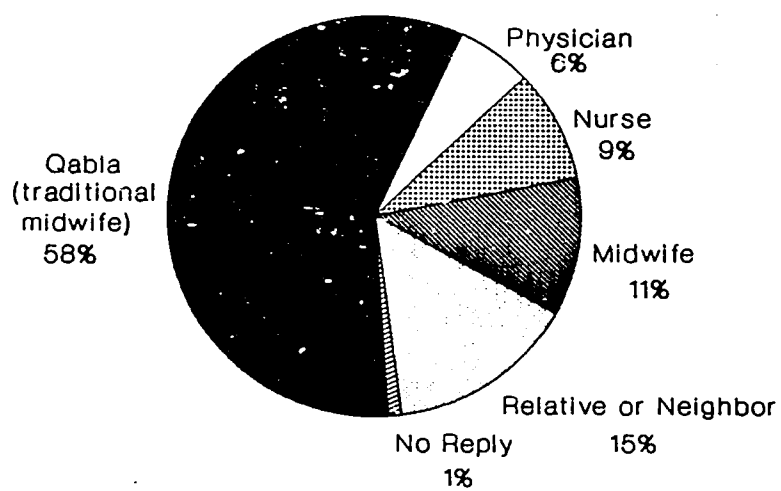

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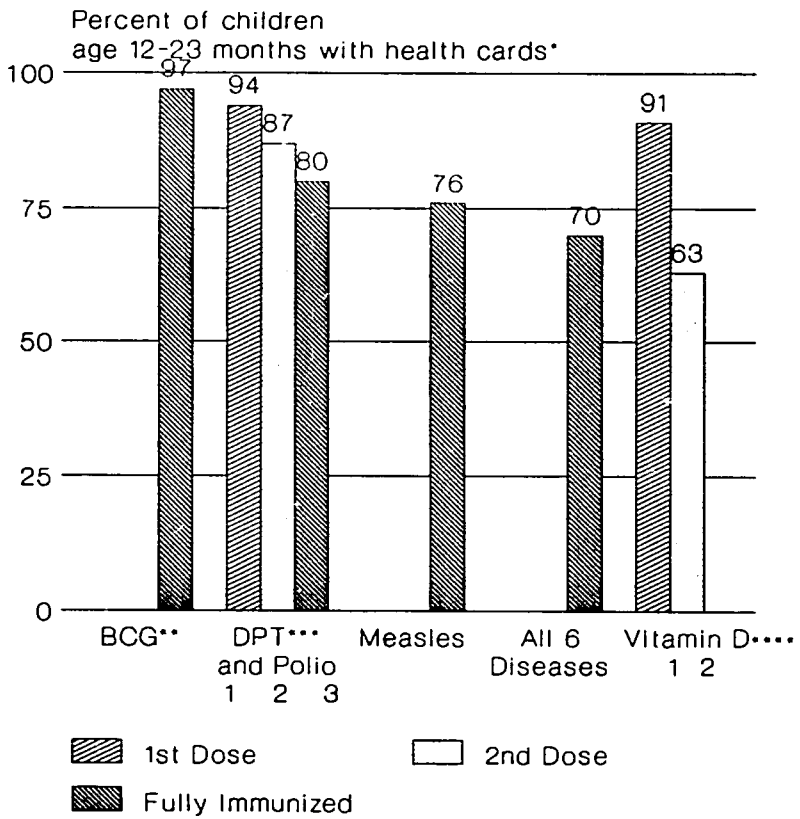
Figure 11
Immunization Coverage

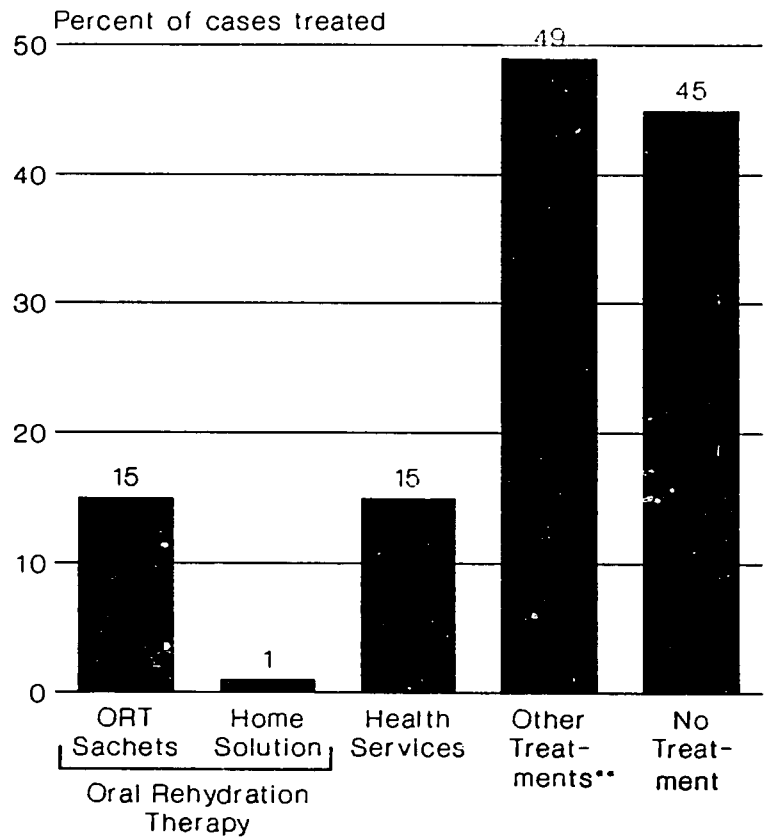


* Only 51% of children age 12-23 months have health cards
** Tuberculosis
*** Diphtheria, pertussis (whooping cough), and tetanus
**** Prevents rickets

Morocco ENPS 1987

Figure 12
Treatment of Childhood Diarrhea*

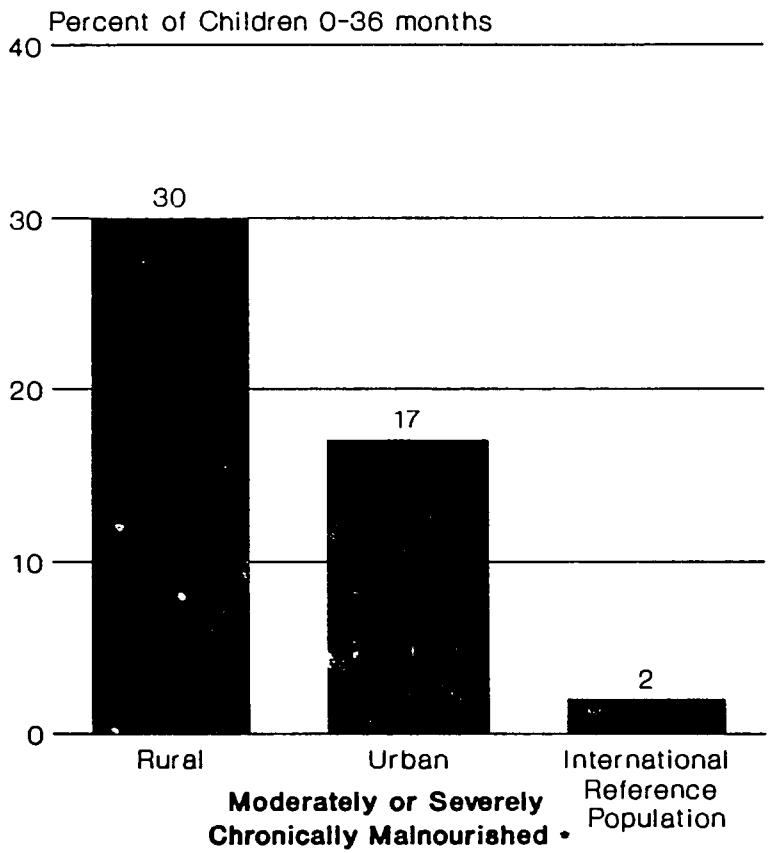
(Children under age 5 having diarrhea during the two weeks before the survey)



* Total of columns is greater than 100 due to multiple treatments
** Treatments include rice, soup, herbal medicines and pharmaceutical products

Morocco ENPS 1987

Figure 13
Malnutrition of Children
(Based on Height for Age Ratio among Children 0-36 Months)



*Less than or equal to 2 standard deviations below the median of the international reference population

Morocco ENPS 1987