



# Turkey

Demographic and Health Survey 2008  
Key Findings



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The Turkey Demographic and Health Survey, 2008 (TDHS-2008) is the fourth Demographic and Health Survey in Turkey. Demographic and Health Surveys are conducted in Turkey as part of the series of quinquennial demographic surveys. The first three were carried out in 1993, 1998 and 2003. TDHS-2008 is a nationally representative survey of 10,525 households and 7,405 ever-married women age 15-49. Fieldwork for the TDHS-2008 was carried out between October and December 2008 by the Hacettepe University Institute of Population Studies, in collaboration with the General Directorate of Mothers and Child Health/Family Planning, Ministry of Health and State Planning Organization. The financial support of the TDHS-2008 has been provided by the Scientific and Technological Research Council of Turkey (TÜBİTAK) within the scope of the Support Programme for Research and Development Projects of Public Institutions.

The primary purpose of the TDHS-2008 is to generate recent and reliable information on levels and trends of fertility, infant and child mortality, family planning, maternal and child health and nutrition. Collecting these types of information is essential for making informed policy decisions, and for planning, monitoring, and evaluating programs in reproductive health. The TDHS-2008 sample is designed to allow for analyses at the national level, by urban/rural residence, and for each of five regions in the country. The TDHS-2008 sample also allows analyses for some of the survey topics for the 12 geographical regions (NUTS 1). The data are intended for use by policy makers and program managers to evaluate and improve family planning and health programs in Turkey. Results of this survey can be compared with data obtained from quinquennial demographic surveys conducted in the previous years by HUIPS in Turkey.

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## TURKEY DEMOGRAPHIC AND HEALTH SURVEY, 2008

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*D. YILDIZ*

## POPULATION AND HOUSEHOLD CHARACTERISTICS

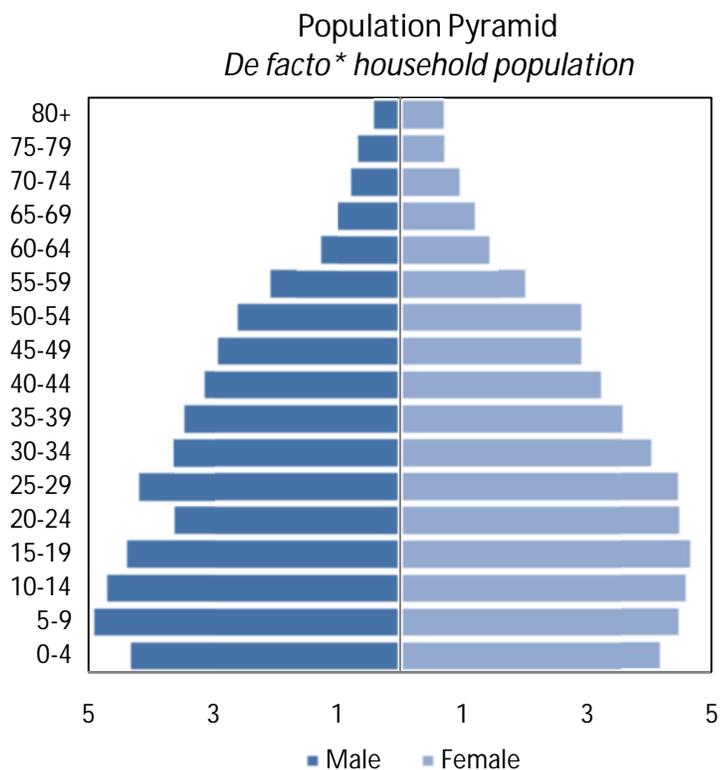
Data collected on the age and sex distribution of the household population and on various socioeconomic indicators enable a descriptive assessment of the household environment within which demographic and health choices are made and changes occur.

### Population by Age and Sex

As a result of the effects of past demographic trends, Turkey has a young age structure: 9 percent of population is below age 5 and 27 percent of population is below age 15, while 7 percent is age 65 or older. Females outnumber males in Turkey, comprising 51 and 49 percent of the total population respectively.

### Household Composition

Households are predominantly headed by males in Turkey. Only 13 percent of the households are headed by females. The average household size is 3.9 persons, it decreases to 3.8 persons in urban areas and increases to 4.2 persons in rural areas. Only 6 percent of Turkish households are single-person households with little difference between urban and rural areas. About three in ten households have 5 or more members.



\* Includes persons that were present in the household at survey date.

Households in Turkey have an average of 3.9 persons. Average household size decreases to 3.8 persons in urban areas and increases to 4.2 persons in rural areas.

### Household Characteristics

Overall, about one in three households get their drinking water from pipes, mainly within their dwelling. Nearly for half of rural households, the source for the piped water is a river, stream or other surface water. The most common source of drinking water in urban areas is bottled water (49 percent). In Turkey, more than nine in ten households have improved toilet facilities that are not shared with other households, of which 80 percent flush to a piped sewer system and 13 percent use pit latrine with slab. While flush toilets are present in most urban households (95 percent), they are present in less than half of rural households (41 percent). With regard to flooring, about one fifth of households live in dwellings with cement floors. Eleven percent of households in rural areas have earth floors, compared to only less than 1 percent of households in urban areas. Approximately 80 percent of households have one or two rooms for sleeping. On average, there are 2.0 persons per sleeping room (2.3 in rural and 1.9 in urban areas) in Turkey.

## Household Durable Goods

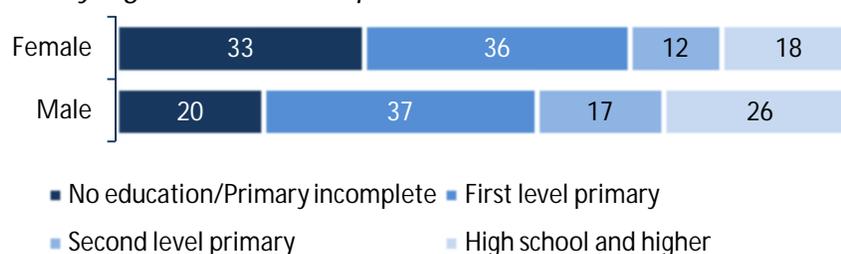
The availability of durable consumer goods is an indicator of the socio-economic level. Most of the households in Turkey enjoy the convenience of electrical appliances. Televisions, refrigerators or mobile phones are present in more than 90 percent of households. More than 70 percent of households own an oven, a vacuum cleaner or a washing machine.

Almost three in ten households own a desktop computer and about one in ten households owns a laptop computer. Ownership of various durable goods varies by place of residence, with higher proportions of ownership among households in urban areas than in rural areas.

## Educational Level of the Household Population

The median number of years of schooling for men is 5.1 which is about half a year higher than the median for women. However, sex differentials in educational attainment have narrowed among younger cohorts. More than 9 in ten primary school age children in Turkey are attending primary school. However, at the high school level, only 3 of 5 children attend school. Regional disparities persist.

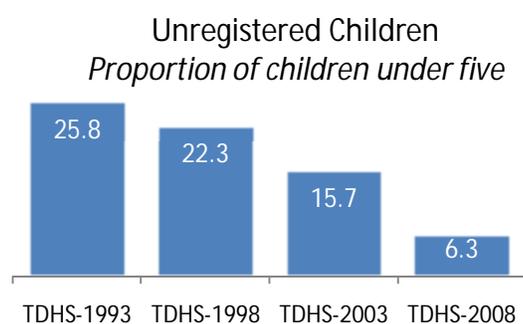
Educational attainment of household population  
*Percent distribution of women and men aged six and over by highest level of completed education*



## Birth Registration

In the TDHS-2008, mothers were asked about the registration status of their children. Ninety-four percent of births in the last five years have been registered. The proportion of unregistered children has declined from 16 percent in TDHS-2003 to 6 percent today.

Proportions of registration do not vary much by sex of child, however, children living in urban areas are more likely to be registered than their rural counterparts. The highest proportion of unregistered children live in the East region (11 percent), whereas proportions are 5 percent or less in all remaining regions. Birth registration is also related to the educational level



of mother and household wealth. While the proportion of unregistered children is 14 percent for mothers with no education, it is only 2 percent for children whose mothers have at least high school education.

## WOMEN'S EDUCATION, EMPLOYMENT AND ATTITUDES TOWARDS GENDER ISSUES

*The TDHS-2008 collected information on literacy, education, employment status and certain attitudes of ever married women age 15-49 so as to obtain insights into women's reproductive and health seeking behavior and women's status.*

### Women's Educational Level

Women in reproductive age groups today are far more educated than 10 years ago. The proportion of women who have completed at least second level primary school (8 year compulsory education) has increased about 65 percent and the proportion of women who have not completed first level primary school (5 years) has declined by 41 percentage points during the last decade. Today, while nearly one in every five women has no education, or has not completed first level primary school, a significant proportion (21 percent) has completed at least high school. About 52 percent of women have only completed first level primary school.

Age correlates negatively with education. Urban women in Turkey are much more likely to have higher education than their rural counterparts. Twenty-eight percent of rural women have no educational level completed, compared to only 15 percent of urban women. Overall, women in Turkey have completed 4.6 median years of schooling which varies by region and place of residence.



S. TÜRKYILMAZ

### Women's Employment

The TDHS-2008 collected information on the current employment of women. Two in five women were in employment at any time during the 12-month period before the interview. About a third of women were working at the time of the survey. About half of the women in the Aegean, East Marmara and West Black Sea regions, and two-thirds of women in the East Black Sea region were employed at any time during the last 12 months preceding the survey. The lowest level of employment appears to be among women in the Central and East regions. Younger women tend to be employed less than their older counterparts and employment among women not currently married is substantially higher than among currently married women.

### Attitudes Towards Gender Roles and Domestic Violence

Four in 5 women agree that women should be virgins when they get married, and 40 percent agree that women should not argue with their partners even if they disagree with them. Fifteen percent agree that men are wiser than women. About seven in ten women disagree that women may go out without their husbands' permission. One quarter of women agree that men are justified in exerting physical violence to their wives for at least one reason. The proportion of such women dropped from 39 percent to 25 percent from TDHS-2003 to TDHS-2008. Women's waste of money and neglecting the children are the most accepted reasons for justifying physical violence. Women with higher education, living in urban areas and wealthier households are less likely to agree with the exertion of physical violence.

## FERTILITY

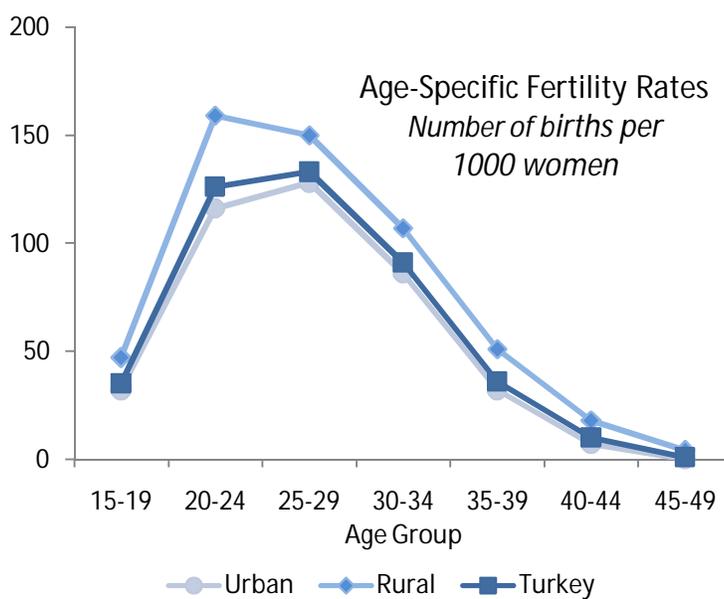
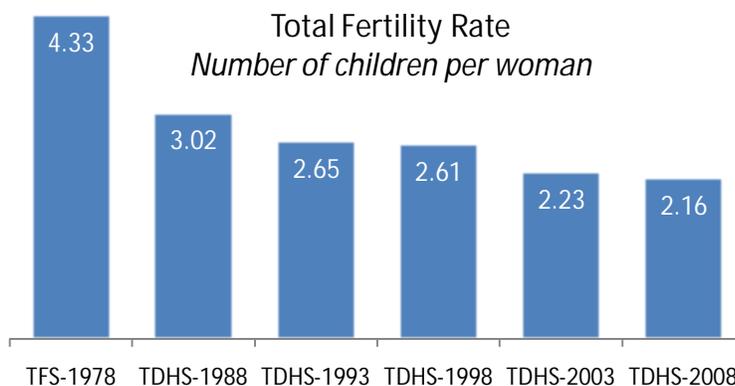
The TDHS-2008 looks at a number of fertility indicators, including levels, patterns, and trends in both current and cumulative fertility; the length of birth intervals; and age at which women marry and initiate childbearing. Fertility has fallen sharply over the past several decades and the fertility level reached in Turkey by the 2000s is slightly over the replacement level of fertility. A noticeable trend towards later marriage in Turkey is also observed.

### Fertility Levels and Differentials

At current fertility rates, a woman in Turkey will give birth to an average of 2.16 children during her reproductive years – a total fertility rate that is 50 percent lower than the rate recorded in 1970s. Childbearing in Turkey is concentrated in the age group 20-29; an average woman in Turkey will have one child by age 25, and two children by age 30. The fertility level declines sharply after age 30 and childbearing is negligible for women in their forties.

There are wide variations in fertility levels among regions. Fertility rate is highest in the East (3.3 children per woman) and lowest in the West (1.7 children per woman). Women living in rural areas have more children than women living in urban areas (2.7 births per woman and 2.0 births per woman respectively).

Education has an important impact on fertility. Women who have no education have 0.4 children more than women with first level primary education, and 1.1 children more than women with at least high school education.



At current fertility rates, women in Turkey will give birth to an average of 2.16 children during their reproductive years.

### Age at First Marriage

The rising age at marriage is one of the factors that has contributed to fertility decline. Marriage is almost universal and most women complete their reproductive ages in a marital union. Most of the never married women are under age 25; by the time women reach their early thirties, almost 90 percent are or have been married, and by the end of their reproductive years, only less than 1 percent of women have never been married.

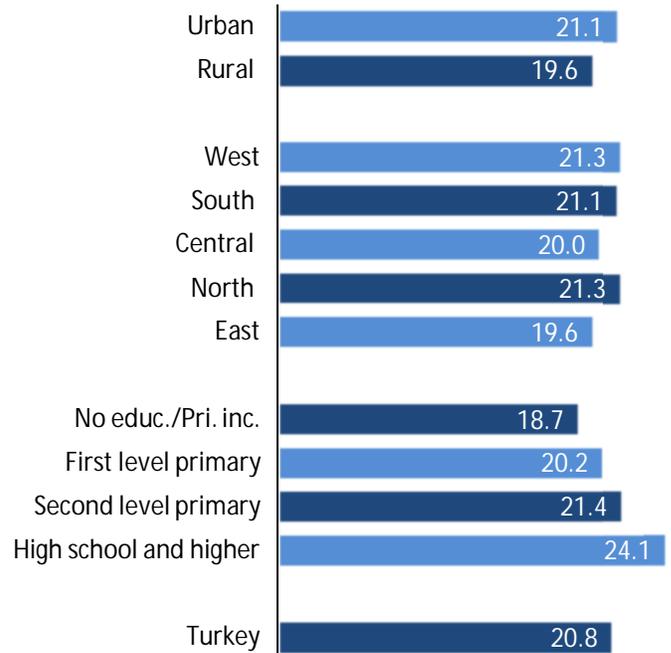
The median age at first marriage is 20.8 for women age 25-49. Overall, a steady increase is observed in the median age at first marriage. The median age at first marriage among women age 25-29 is 22.1 years compared to 19.5 years among women age 45-49. Marriage at younger ages is rare in Turkey; less than 1 percent of women age 15-19 marry before the age 15.

The median age at first marriage varies by region, place of residence, and level of education. Median ages at first marriage observed for urban and rural women age 25-49 indicate that urban women marry one and a half years later than their rural counterparts. Women living in the East marry nearly 1.7 years earlier than women living in the West.

As expected, there is a positive association between the median age at first marriage and educational level of the respondents. The median age at first marriage among women with at least high school education is more than 5 years higher than the median age among women with less than first level primary education level.

Overall, women in Turkey are marrying at a later age than they did previously. The median age at marriage is 20.8 years.

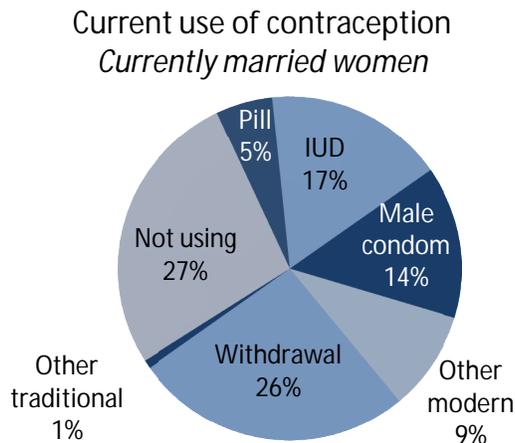
Median Age at First Marriage by Background Characteristics  
*Women aged 25-49*



E. Yiğit

## FAMILY PLANNING

The TDHS-2008 collected information on contraceptive knowledge, attitude and use. The information on family planning is highly important since it provides insights into one of the principal determinants of fertility and serves as a key measure for assessing the success of the national family planning program.



Knowledge of modern family planning methods is virtually universal. Current use of contraception has increased in the past ten years, from 64 percent in 1998 to 73 percent in 2008.

### Knowledge and Use of Contraception

Knowledge of both modern and traditional family planning has been universal for some time; almost all women interviewed in the survey are familiar with at least one method. The pill and IUD are the most widely known methods (98 percent) while the least known methods are female condom (17 percent) and emergency contraception (29 percent).

At the time of the survey, 73 percent of married women in Turkey were using a family planning method with 46 percent depending on modern methods and 27 percent using traditional methods. Withdrawal is the most popular method among currently married women, with 26 percent. About one in five currently married women is using IUD. The usage of male condom is 14 percent.

There have been significant changes in the levels of contraceptive use in the last decade, especially for modern methods. The level of traditional method use appears to have remained almost unchanged, whereas the use of modern contraceptive methods increased from 38 percent in TDHS-1998 to 46 percent in TDHS-2008. The increases in the use of female sterilization and male condom are noteworthy.

Contraceptive use varies with residence, region, level of education, and number of children alive. Currently married women living in urban areas are more likely to be using any contraceptive method than women in rural areas (74 percent and 69 percent respectively). Current use is lowest in the East (61 percent) and highest in the West and the North (76 percent).



i. YÜKSEL

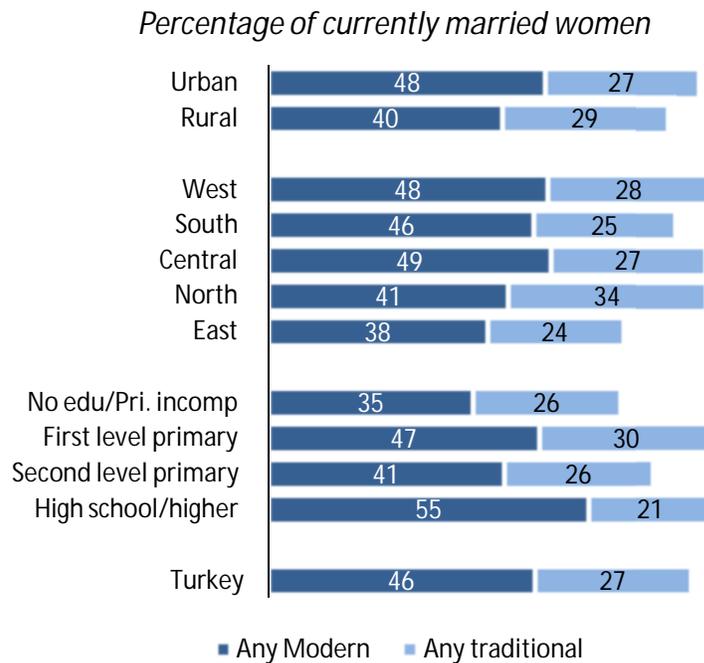
## Source of Family Planning Methods

The public sector remains the major source of contraceptive methods in Turkey, providing methods to 61 percent of current users. The share of private sector in providing contraception is 39 percent. The share of the public sector has slightly increased over the last five years. The major change is a substantially increased reliance upon the public sector in the case of all methods, with the exception of female sterilization.

In the public sector, 36 percent of users obtain their modern contraceptive methods from health centers/health houses or Mother and Child Health-Family Planning centers and 15 percent from government hospitals. In the private medical sector, the pharmacy is the most commonly used source, providing contraceptive methods to one-fourth of all users of modern methods.

The level of current use of family planning differs significantly with graduation from first level of primary school (5 years of schooling). Level of use increases to 79 percent for women with one to four children, and decreases to 69 percent for women with five or more children.

### Current use of Family Planning by Background Characteristics



### Discontinuation of Contraceptive Use

The rate at which users discontinue use of contraception and their reasons for discontinuation are key concerns for family planning programs in order to improve the quality of services. The results of TDHS-2008 indicate that during the five years preceding the survey, one out of three contraceptive users in Turkey stop using a contraceptive method within 12 months of starting use. The discontinuation rate is as high as 71 percent for injections, 50 percent for the pill and 38 percent for the withdrawal. About 15 percent of those who discontinue use switch to another method.

The desire to become pregnant accounts for one quarter of all discontinuations. Side effects and health concerns were frequently mentioned as reasons for discontinuation of modern methods. Method failure is more common among withdrawal users (35 percent) than modern method users. However, 17 percent of condom discontinuations and 9 percent of pill discontinuations were also due to method failure.

## ABORTION

### Current Level of Abortion

*The TDHS-2008 collected information on induced abortions, spontaneous abortions, and stillbirths which are important maternal health indicators.*

Overall, while few women had a stillbirth (4 percent), nearly one-fifth of ever-married women reported ever having a spontaneous abortion and 22 percent having an induced abortion. Among the women who had an induced abortion, 64 percent had had only one induced abortion.

Slightly more than one out of five pregnancies during the 5 years prior to TDHS-2008 terminated in other than a live birth. Induced and spontaneous abortions dominate non-live terminations. Only about one out of 100 pregnancies ended in a still birth, while there were 21 abortions per 100 pregnancies, of which 10 were induced.

A useful summary index of the age-specific abortion rates is the total abortion rate (TAR). The TAR is the average lifetime number of abortions a woman would have if she were to experience the current age-specific abortion rates. The TAR is estimated as 0.3 for the five years preceding the TDHS-2008. The age-specific rates peak among women age 35-39, and decline among older women. Rates of abortion are higher in urban than rural settlements at all ages, except the 15-19 cohort, where the reverse is observed.

Nearly four in five women who had an induced abortion in the five-year period preceding the survey, reported that the abortion took place at a private doctor's clinic or a private hospital or clinic (70 percent).

At current age specific abortion rates, women in Turkey will have aborted an average of 0.3 children during their reproductive years.



T. ADALI

## FERTILITY PREFERENCES

*Information on fertility preferences and intentions to use family planning in the future is of particular interest to policymakers and program managers as they seek to address the contraceptive needs of nonusers who are concerned about spacing or limiting their childbearing.*

### Desire for More Children

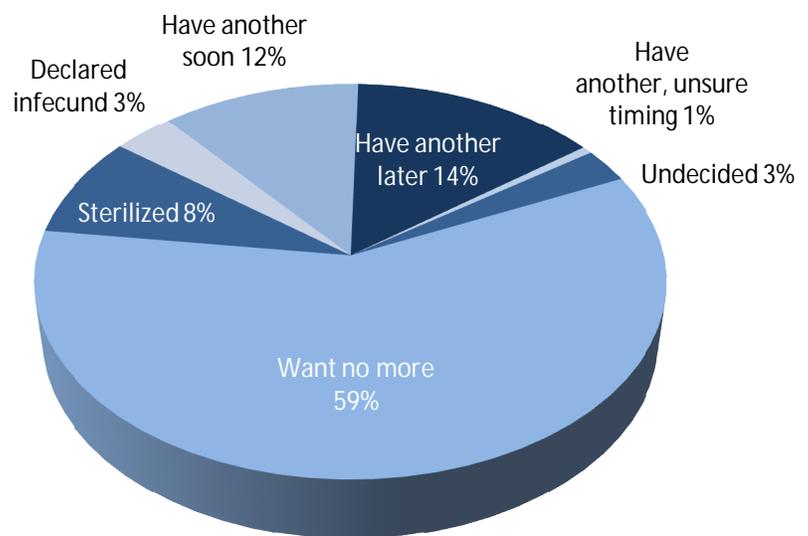
Sixty seven percent of currently married women do not want to have any more children or are sterilized. An additional 14 percent want to delay their next birth for at least two years. The strong desire to stop childbearing appears when women have had two living children and remains at high levels at higher order parities. Overall, similar proportions of urban and rural women want to terminate childbearing. The desire to stop childbearing is higher among women living in the North region (70 percent) than those living in the East region (65 percent).

Approximately half of the respondents stated two children as ideal, while only 19 percent of women considered four or more children as ideal. The mean ideal number of children has remained about the same for the last 4 surveys as 2.5 children.

Regarding the planning status of births in the five years preceding the survey; 7 in ten births were wanted at the time of conception, 11 percent were wanted but at a later time, and 18 percent were not wanted at all. Comparison with TDHS-2003 indicates that birth planning efficiency has increased.

Wanted and actual total fertility rates were calculated ever-married women, and survey results indicate that if all unwanted births were avoided, a woman would have an average of 1.6 births, which is 26 percent lower than the observed fertility rate. The gap between actual and wanted fertility rates is 1.3 children for women living in the East region and 1.2 children for the women who have no education.

Fertility Preferences  
Percentage of currently married women



If all unwanted births were avoided, the total fertility rate would be 1.6 births per women, 26 percent lower than the observed rate of 2.2.

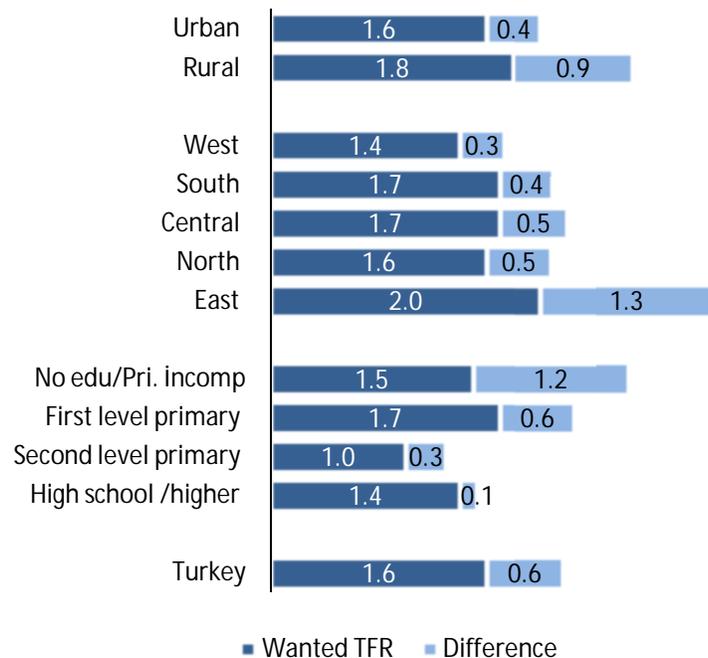
## Unmet Need for Family Planning

Four-fifths of currently married women in Turkey have a demand for family planning services, either for limiting or spacing purposes (59 and 20 percent, respectively). Of this demand, 92 percent is satisfied. The level of total unmet need is the same as observed in TDHS-2003; six percent of all currently married women have an unmet need for family planning today.

The overall unmet need for family planning follows a declining trend with increasing age. Unmet need for spacing purposes is higher among younger women, while unmet need for limiting childbearing is higher among older women. Unmet need is higher among women age 15-29 and women living in rural areas. Unmet need by region varies from 4 percent of women in the West, to 14 percent of women in the East. Since educated women are more likely to use a contraceptive method than uneducated women, unmet need decreases and the percentage of demand satisfied increases with increasing educational level.

Six percent of currently married women in Turkey have an unmet need for family planning, either for spacing or for limiting purposes.

## Differences Between Wanted and Actual Total Fertility Rates by Background Characteristics *Women aged 15-49*



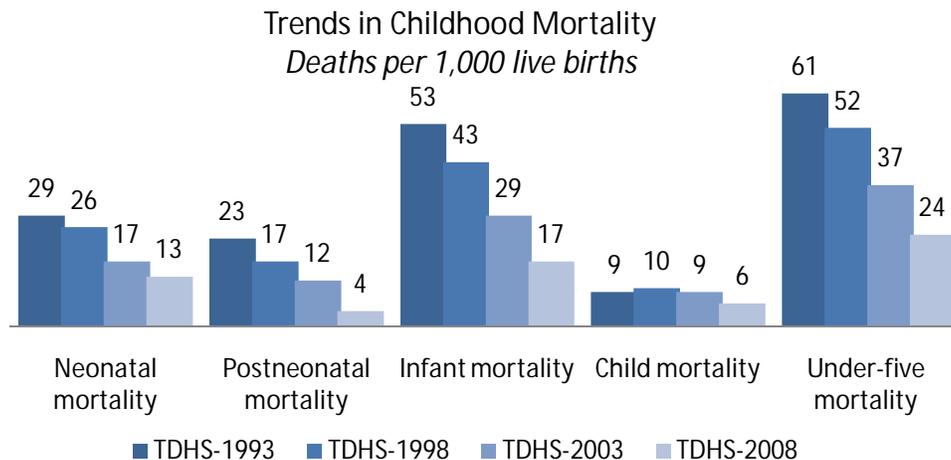
S. ADALI

## CHILD HEALTH

## Infant and Child Mortality

*Identifying the segments of the child population that are at greater risks of dying, contributes to efforts to improve child survival and lower the exposure of young children to risk.*

*Infant and child mortality rates have rapidly declined in the last decade.*



At the mortality level prevailing during the five-year period before the TDHS-2008, 17 of 1,000 infants born will not survive to their first birthday. About three out of four infant deaths occurs during the first four weeks of life. The pattern where neonatal mortality rates exceed post-neonatal mortality rates is still observed. For the same period, child mortality is found to be approximately 6 per 1,000. The results also show that the probability of dying before the fifth birthday is around 24 per 1,000. Under-five mortality in the 5 years before the survey is 41 percent of what it was 10 to 14 years before the survey. Seventy-one percent of under-five deaths occur before the first birthday.

17 of every 1,000 live born infants die before reaching their first birthday.

The infant mortality rate in the rural areas is about 50 percent higher than in urban areas. Infant and under-five mortality rates are higher than the national average in the South and East regions.

The survival chance of a child is closely related to his/her mother's level of education. The infant mortality rate for children whose mothers have no education or have not completed primary school, is approximately 3 times higher for children whose mothers have at least high school education.

Perinatal mortality rate is estimated as 19 per thousand during the 5 years preceding the survey. The perinatal mortality rate exhibits a U-shaped relationship with the age of the mother; the rate declines to 13 per thousand when the mother's age is 20-29.

There is a strong relationship between a mother's pattern of fertility behavior and her children's survival chances. Almost 1 out of three children born in the five years preceding the survey were at elevated risk of dying at the time of their birth. High birth orders and short birth intervals are the major factors contributing to elevated risks of mortality. The probability of dying is considerably higher for infants born from a mother who was older than 34 and who already had at least three births.

Children born after short birth intervals are at much greater risk of dying than children born after long birth intervals.

### Vaccination

The percentage of children 15-26 months-old, fully immunized by the time of the survey is 80.5. Only 1.6 percent have not received any vaccination.

Of children age 15-26 months, 96 percent have been vaccinated for tuberculosis (BCG vaccine) and 89 percent for measles. Ninety-seven percent of children have received the first doses of DPT and polio vaccines. Vaccination coverage would be higher if the dropout rate for DPT and polio were reduced. Currently, one in ten children who receive the first dose of DPT and 8 percent of children who receive the first dose of polio do not complete the three-dose regime. This represents the magnitude of follow-up cases that the vaccination programs have to consider.

There are differences in vaccination coverage by region, place of residence and educational level of mothers. Proportion of fully vaccinated children is significantly lower in the East (64 percent), followed by the North and South regions (84 and 82 percent respectively). As a result of higher drop-out rates, coverage in rural children for the third dose of DPT falls to 82 percent. The percentage of fully vaccinated children is almost 1.4 times higher among children whose mothers have at least high school education than among children whose mothers have no education.

Eighty-one percent of children aged 15-26 months have been fully immunized by the time of the survey.

### Diarrhea

Dehydration caused by diarrhea is one of the most important causes of childhood mortality. Within the two weeks preceding survey date, 23 percent of children under five years of age suffered from diarrhea.

Within this age range of children, those aged 6-23 months are most likely to have diarrhea. There is also variation according to households' and mothers' characteristics; children whose mothers have no education, or are living in households of low wealth status have higher diarrhea prevalence (36 and 31 percent respectively).

Forty-seven percent of children who had diarrhea in the last two weeks have been taken to a health care provider. Sixty-three percent of such children were given oral rehydration therapy (ORT) or increased fluids. Girls were less likely to be taken to a health care provider and to receive ORT or increased fluids than boys during a diarrheal episode.

It is recommended that children with diarrhea should be offered around the same amount of food and more fluids as when they are not sick. Half of the children with diarrhea received more fluids than they usually did. On the other hand, 53 percent of sick children received less food, and 16 percent received less fluids than usual.

## REPRODUCTIVE HEALTH

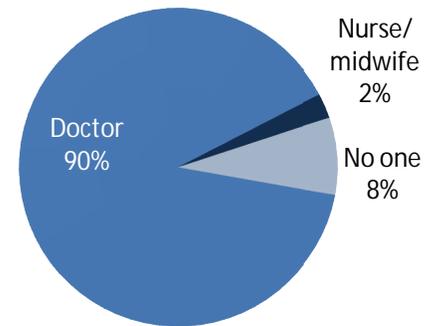
Maternal health care services are widely available in Turkey. TDHS-2008 measures the extent to which women receive medical care during pregnancy, at the time of delivery and in the postpartum period.

### Antenatal Care

Utilization of health care services is high in Turkey: ninety-two percent of mothers received antenatal care from a health professional during the five years preceding the survey. Nine out of ten women received antenatal care from doctors. The proportion of mothers who did not receive any ANC has declined by 58 percent in the five years from 2003 to 2008. Still, almost one-tenth of the mothers has not received any ANC.

Overall, about three in four women received antenatal care at least 4 times. The timing and the number of visits made for antenatal care varies by place of residence. The percentage of urban women who received 4 times or more antenatal care is about one and a half times that of rural women. The proportion of women who did not receive any antenatal care is 5 percent in the urban areas, whereas it is three times more for those living in rural areas. Younger women and women with at least high school education are more likely to have received antenatal care. Mothers who are pregnant with children of birth orders three or lower are also more likely to have received antenatal care.

Antenatal Care Provider  
Women who gave live births in  
the last five years



S. TÜRKYILMAZ

Almost for all components of antenatal care, except being examined through ultrasound, women at ages 20-34, women living in the West, in particular those living in the West Marmara and women with higher education are more likely to receive various components of ANC.

### Delivery Care

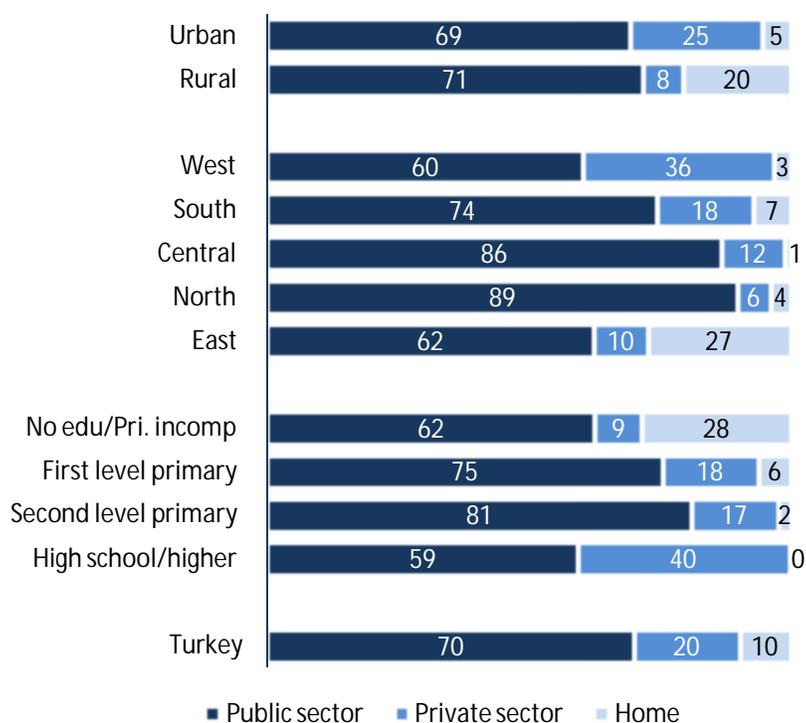
About nine in ten births were delivered at a health facility, representing a 12 percent increase in the level since 1998. Health facilities of public sector were preferred for delivery to a much greater extent (70 percent), than privately run health facilities (20 percent). Home deliveries constitute 10 percent of the births in the five years preceding the survey.

Nine in ten deliveries are assisted by a doctor or a trained midwife/nurse in Turkey.

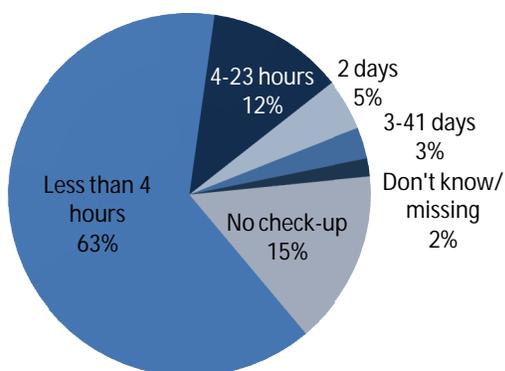
Younger ages for women, lower birth order of the child, high number of antenatal care visits and higher level of education increase the likelihood of delivery at a health facility. Apparent regional and residential differences present that a child born in an urban area is 1.2 times more likely to have been delivered at a health facility than a rural child. Home deliveries are most prevalent in East region (27 percent) and least prevalent in Central region (1 percent).

Almost four in every 10 first births in the five-year period preceding the survey were delivered by caesarean section. Caesarean section percentages are around half of all births in Istanbul, West Marmara and East Black Sea regions.

Place of Delivery by Background Characteristics  
Percent distribution for women who had at least one live birth in the last five years



Timing of First Postnatal Check-up  
First postnatal check for women who gave live births in the last five years



### Postnatal Care

Postnatal care is very important for both mother and her child. Eighty two percent of women received postnatal care checkup, almost all of them by a doctor. Four in five women had their first checkup within two days of birth. There are regional differences for receiving postnatal care and its timing; while Aegean women have the highest proportion of receiving it (92 percent) within the first 41 days, only 55 percent of women receive postnatal care in Central East Anatolia. As for the timing of first postnatal checkup, the proportion of women receiving it in the first 4 hours range from 35 percent in Central East Anatolia to 75 percent in Istanbul.

Postnatal checkups for the baby are important in reducing infant deaths. Eighty eight percent of infants receive postnatal care from health personnel and most babies (67 percent) are seen for postnatal care within four hours following delivery in Turkey.

## NUTRITION INDICATORS FOR CHILDREN AND MOTHERS

The TDHS-2008 examines several important aspects of the nutritional status of Turkish women and children, including infant feeding practices, duration and intensity of breastfeeding. In order to assess the nutritional status of all children under the age of five and women age 15-49, anthropometric (height and weight) data were also collected.

### Nutritional Status of Children

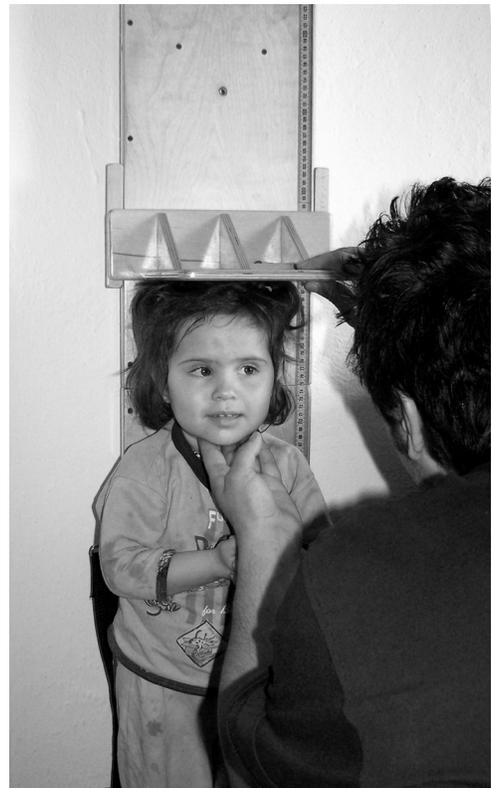
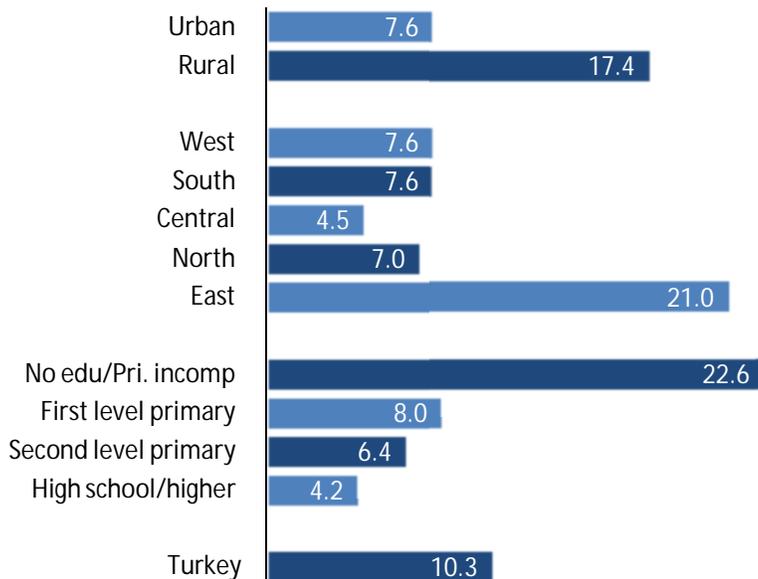
The nutritional status of young children is a comprehensive index that reflects the level and pace of household, community, and national development. One in ten children under age five is *stunted* (short for their age), with one-third of these children classified severely stunted. Acute malnutrition is not a problem; less than one percent of children are *wasted* (thin for their height). Only 3 percent of children under age five are *underweight* for their age.

Stunting is more prevalent in rural areas, in the East, and among children whose mothers have no education. Stunting occurs more frequently for children who are of higher birth orders and for those born after an interval of less than 24 months.

The deterioration in nutritional status starts in the first years of life, and by age five 10 percent of children are short for their age.

### Chronic Undernutrition (Stunting) by Background Characteristics

Percentage of children under five years of age



Y. COŞKUN

## Breastfeeding and Supplementation

Breastfeeding is almost universally practiced in Turkey; almost all children (97 percent) are breastfed for a period of time. However, the timing of initiation of breastfeeding for all children indicates a rather late initiation of breastfeeding; only 40 percent of ever-breastfed children have started as early as within one hour of birth. The proportion of children who were put to breast within the first day of birth is almost 73 percent. The median duration of breastfeeding is 16 months, two months more from the median reported in TDHS-2003. Median durations for exclusive breastfeeding are very short, between 1 and 2 months for most subgroups. Male children, children living in urban areas, in the East region, and those whose mothers have first level primary education are likely to have a somewhat longer period of full breastfeeding.



G. BAŞ

On average, children are breastfed for a relatively long period of time, but supplementary foods and liquids are introduced at an early age. In the first month of life, 69 percent of children were exclusively breastfed. However, 30 percent of children were given other supplements within the first two months of birth. By age 2-3 months, only 42 percent of children are exclusively breastfed. The percentage of children receiving supplements increases to 56 percent among children 2-3 months of age.

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## Nutritional Status of Mothers

In the TDHS-2008, women's nutritional status was measured using the Body Mass Index (BMI), defined as the ratio of weight in kilograms to the square of the height in meters ( $\text{kg}/\text{m}^2$ ).

The mean height for mothers was 157 centimeters, almost the same as the mean reported in the TDHS-2003. Two percent of mothers were shorter than 145 centimeters, and 10 percent were below 150 centimeters. The mean maternal weight was 66 kilograms. Nearly a third of mothers weighed more than 70 kilograms. The mean BMI of not pregnant mothers was 26.7. Mothers' BMI fell below 18.5 in less than 2 percent of cases. Approximately, 3 out of 5 mothers are in the overweight group with a BMI above 25.0. Obesity is a problem among mothers; 24 percent of mothers had a BMI of at least 30.

## KEY INDICATORS

	Total	RESIDENCE		REGION				
		Urban	Rural	West	South	Central	North	East
<b>DEMOGRAPHIC SITUATION</b>								
<b>Fertility</b>								
<i>Births per women age 15 – 49</i>								
Total fertility rate	2.2	2.0	2.7	1.7	2.1	2.2	2.1	3.3
Total wanted fertility rate	1.6	1.6	1.8	1.4	1.7	1.7	1.6	2.0
<b>Mortality</b>								
<i>Deaths per 1000 births in the ten years before the survey</i>								
Neonatal mortality rate	15	13	20	9	17	12	16	24
Infant mortality rate	26	22	33	16	30	22	24	39
Under – five mortality rate	33	29	43	26	35	23	27	50
<i>Deaths per 1000 births in the five years before the survey</i>								
Neonatal mortality rate	13	-	-	-	-	-	-	-
Infant mortality rate	17	-	-	-	-	-	-	-
Under – five mortality rate	24	-	-	-	-	-	-	-
<b>Birth Registration</b>								
Percentage of registered children under age five	93.7	94.6	91.6	94.7	96.2	96.0	96.6	88.9
<b>REPRODUCTIVE HEALTH</b>								
<b>Safe motherhood</b>								
<i>Percentage of women with a live birth in the five years before the survey</i>								
Mothers who received antenatal care from a doctor	89.5	93.0	79.4	94.7	93.6	90.8	91.4	76.8
Births delivered at home	9.7	5.4	20.4	3.3	7.2	1.2	3.9	27.2
Mothers with delivery assistance from a doctor	64.1	71.2	46.1	82.5	60.4	76.0	64.0	32.5
Women who received a postnatal checkup within 4 hours of delivery	63.4	66.9	53.3	69.7	61.7	67.3	66.9	49.1
<b>High – risk childbearing</b>								
Adolescent women age 15 – 19 who have begun childbearing	5.9	5.0	8.6	5.5	4.5	7.5	4.6	6.1
<b>Family planning</b>								
<i>Percentage of currently married women 15 – 49</i>								
<b>Women currently using</b>								
Any contraceptive method	73.0	74.3	68.9	76.3	70.4	75.5	75.6	61.4
Any modern contraceptive method	46.0	47.8	40.4	48.2	45.8	48.8	41.4	37.8
IUD	16.9	17.5	15.0	17.4	18.3	18.4	9.8	15.1
Pill	5.3	5.6	4.6	5.8	4.1	4.9	5.2	5.6
Condom	14.3	15.4	11.0	15.5	12.9	17.8	12.0	8.1
Withdrawal	26.2	25.6	28.0	27.1	24.1	25.7	33.6	22.9
<b>Women with an unmet need for family planning</b>								
For spacing births	2.1	2.0	2.6	1.7	1.7	2.0	1.2	4.4
For limiting births	4.1	3.4	6.2	2.6	4.2	3.3	3.8	9.4

	Total	RESIDENCE		REGION				
		Urban	Rural	West	South	Central	North	East
<b>CHILD HEALTH</b>								
<b>Vaccinations</b>								
Children 15 – 26 months fully immunized (BCG, measles and 3 doses each of DPT and polio)	80.5	84.2	71.0	84.6	81.8	90.0	83.6	64.3
<b>Treatment of childhood illnesses</b>								
<i>Percentage of children under age five</i>								
In the two weeks before the survey								
Children who had symptoms of diarrhea	23.3	22.8	24.7	20.4	20.3	16.2	18.8	35.9
Children who had symptoms of diarrhea for whom treatment was sought from a health facility or provider	47.0	47.3	46.4	53.7	43.5	29.1	46.3	49.9
<b>MATERNAL HEALTH AND NUTRITION</b>								
<b>Breastfeeding</b>								
Median duration of breastfeeding (months)	15.7	15.9	15.1	15.2	14.7	14.7	15.2	17.7
<b>Child malnutrition</b>								
<i>Percentage of children under age five</i>								
Children who are stunted	10.3	7.6	17.4	7.6	7.6	4.5	7.0	21.0
Children who are wasted	0.9	0.8	0.9	0.9	0.0	0.5	1.5	1.5
Children who are underweight	2.8	2.1	4.8	1.0	3.0	2.1	2.8	5.8
<b>Maternal Malnutrition</b>								
Women with chronic energy deficiency (BMI<18.5)	1.6	1.3	2.6	1.5	1.3	1.9	3.0	1.4
Women who are overweight or obese (BMI>=25.0)	58.4	59.7	54.9	57.4	64.1	58.1	52.1	58.8

