

## CHAPTER 4 FERTILITY LEVELS, TRENDS AND DIFFERENTIALS

### 4.1 INTRODUCTION

This chapter examines a number of fertility indicators, including levels, patterns and trends in both current and cumulative fertility; the length of birth intervals; and the age at which women initiate childbearing. Information on current and cumulative fertility is essential in monitoring population growth. Data on birth intervals are important because short intervals are strongly associated with childhood mortality. The age at which childbearing begins can also have a major impact on the health and well-being of both the mother and child.

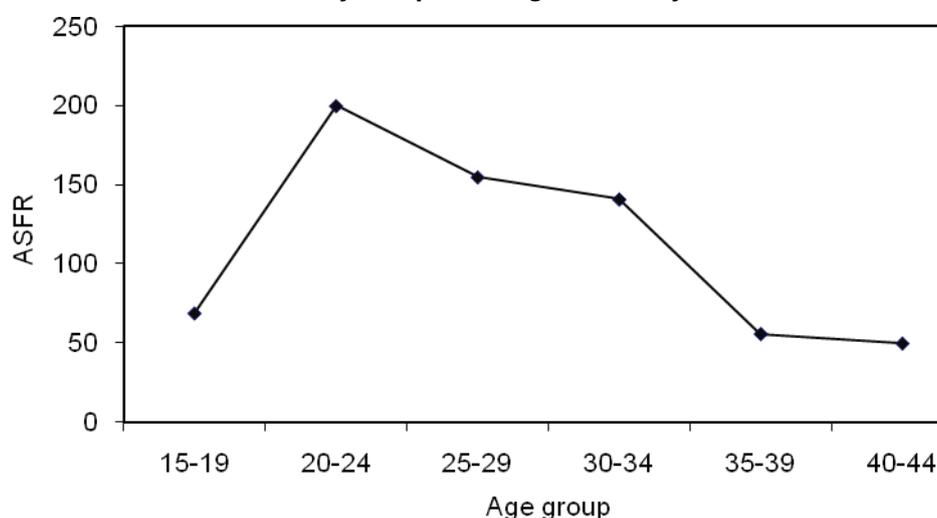
Data on fertility were collected in several ways. Each woman was asked about all of the births she had had in her lifetime. To ensure completeness of responses, the duration, month and year of termination, and the result of the pregnancy were recorded for each pregnancy. In addition, questions were asked separately about sons and daughters who live with the mother, those who live elsewhere, and those who have died. Subsequently, a list of all births was recorded along with the name, age if still alive, and age at death if dead. Finally, information was collected on whether women were pregnant at the time of the survey.

### 4.2 CURRENT FERTILITY

The current fertility level is one of the most important topics in this report because of its direct relevance to population policies and programmes. Current fertility can be measured using the age-specific fertility rate (ASFR), total fertility rate (TFR), general fertility rate (GFR), and crude birth rate (CBR). ASFR provides the age pattern of fertility, while TFR refers to the number of live births that a woman would have had if she were subject to the current ASFRs throughout the reproductive ages (15–49 years). GFR is expressed as the number of live births per 1,000 women of reproductive age, and CBR is expressed as the number of live births per 1,000 population. The measures of fertility presented in this chapter refer to the three-year period prior to the survey. This generates a sufficient number of births to provide robust and current estimates.

Current estimates of fertility levels are presented in Table 4.1. Overall, the 2007 NDHS estimated a total TFR of 3.4. This means that on average, a Nauruan woman would have 3.4 children by the end of her reproductive period if the current ASFR remains constant at the level observed in the three-year period before the survey. The results show a declining trend of TFR from 4.0 in the 2002 census report. Table 4.1 also shows that GFR is estimated to be 119 children per 1,000 women aged 15–49 years, while CBR is reported to be 30 per 1,000 population.

**Figure 4.1: Age-specific fertility rates for women aged 15–49 three years preceding the survey**



ASFRs are depicted in Figure 4.1. The most fertile age group was 20–24 years, with 200 births per 1,000 women. Fertility levels of women aged 40–44 were very low, followed by women aged 35–39, and teenage women aged 15–19 who gave birth to an estimated 69 children per 1,000 women.

**Table 4.1: Current fertility**

*Age-specific, total rate, the general fertility rate, and the crude birth rates for the three years preceding the survey, by residence, Nauru 2007*

Age group	Total
15–19	69
20–24	200
25–29	155
30–34	141
35–39	56
40–44	50
TFR	3.4
GFR	119
CBR	30.2

Notes: Age-specific fertility rates are per 1,000 women. Rates for the 45–49 age group may be slightly biased due to truncation. Rates are for the period 1–36 months prior to interview.

TFR = total fertility rate expressed per woman.

GFR = general fertility rate expressed per 1,000 women.

CBR = crude birth rate, expressed per 1,000 population.

### 4.3 FERTILITY TRENDS

Table 4.2 uses information from the retrospective birth histories obtained from the 2007 NDHS respondents to examine trends in ASFRs for successive five-year periods before the survey. To calculate these rates, births were classified according to the period in which the birth occurred and the mother's age at the time of birth. Because birth histories were not collected for women over the age of 50, rates for older age groups become progressively more truncated for periods more distant from the survey date. For example, rates cannot be calculated for women aged 45–49 for the period five to nine years or more prior to the survey, because women in that age group would have been 50 years or older at the time of the survey.

**Table 4.2: Trends in age-specific fertility rates**

*Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of the birth, Nauru 2007*

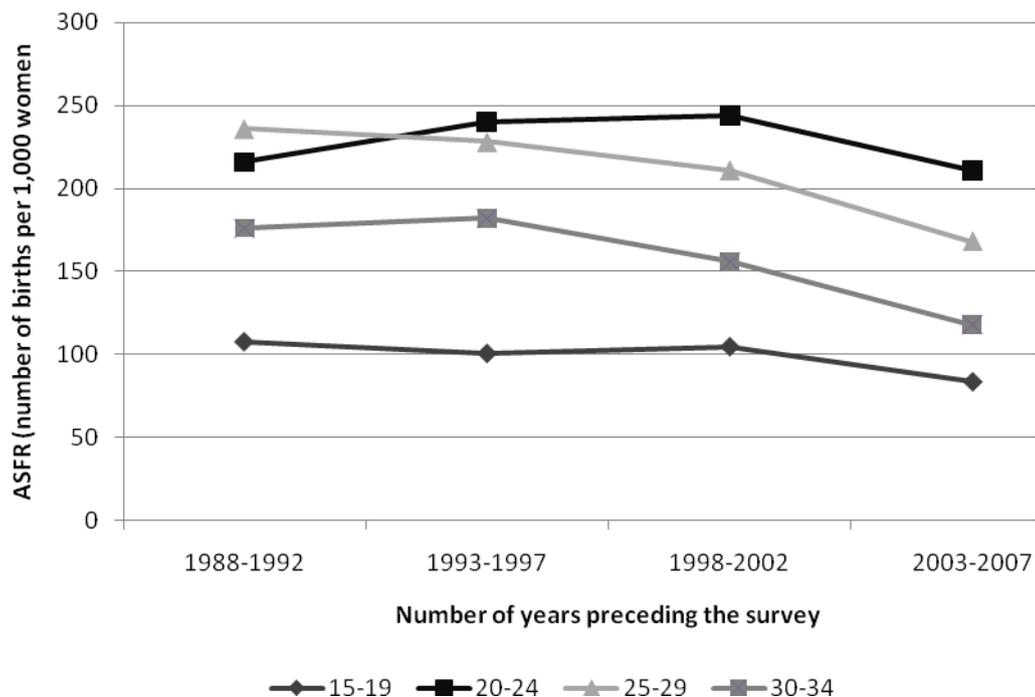
Mother's age at birth	Number of years preceding survey			
	0–4	5–9	10–14	15–19
15–19	84	105	101	108
20–24	211	244	240	216
25–29	168	211	228	236
30–34	118	156	182	[176]
35–39	58	63	[103]	
40–44	[29]	[35]		

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of the interview.

Table 4.2 and Figure 4.2 show fertility trends by mother's age at birth for the last 20 years — roughly corresponding to the period 1988–2007. During the period 1988–2002, fertility trends for

all age groups remained relatively stable. During the period 1998–2007, changes in fertility level seem to have occurred at all age groups. For example, teenage fertility dropped from 105 to 84. There was also a decline of about 17 percent in fertility level among women aged 20–29.

**Figure 4.2: Trends in age-specific fertility rates**



#### 4.4 CHILDREN EVER BORN AND LIVING

Table 4.3 and Figure 4.3 present the distribution of all women and currently married women by number of children ever born, according to five-year age groups. The table also shows the mean number of children ever born. Data on the number of children ever born reflect the accumulation of births to women over their entire reproductive years, and therefore have limited correlation with current fertility levels, particularly when a country has experienced a decline in fertility. However, the information on children ever born is useful for observing how average family size varies across age groups, and for observing the level of primary infertility, particularly for women who have not been able to conceive any children.

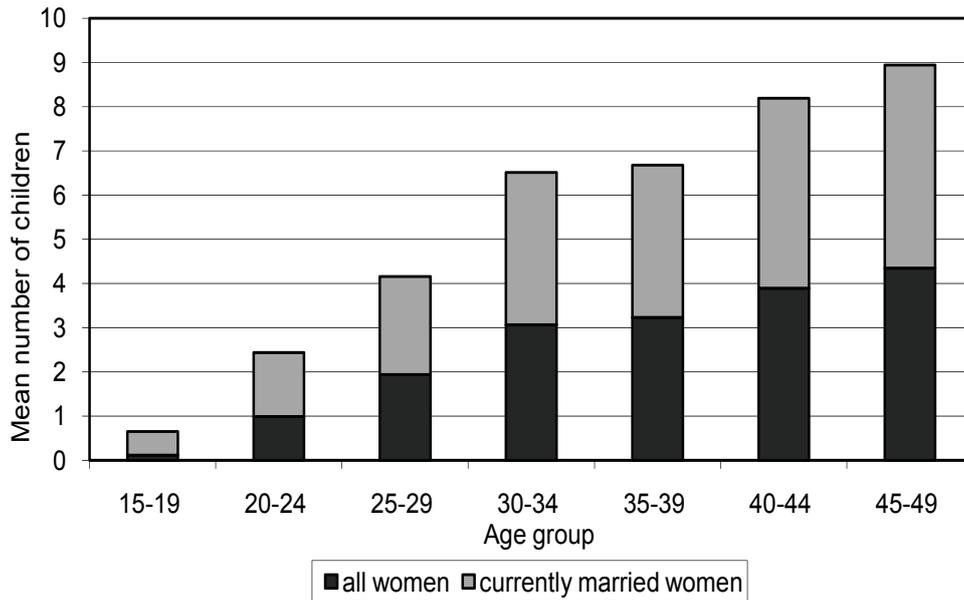
**Table 4.3: Children ever born and living**

*Percent distribution of all women and currently married women by number of children ever born, mean number of children ever born and mean number of living children, according to age group, Nauru 2007*

Age	Percentages of children ever born										Total	Number of women	Mean number of children ever born	Mean number of living children	
	0	1	2	3	4	5	6	7	8	9					10+
<b>ALL WOMEN</b>															
15-19	89.2	8.5	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.00	117	0.13	0.12
20-24	47.9	16.0	22.0	10.7	2.9	0.6	0.0	0.0	0.0	0.0	0.0	100.00	131	1.07	0.99
25-29	30.4	14.0	16.4	14.9	11.2	13.0	0.0	0.0	0.0	0.0	0.0	100.00	96	2.02	1.94
30-34	22.0	5.8	15.6	9.0	13.9	14.4	13.5	0.9	4.9	0.0	0.0	100.00	85	3.18	3.07
35-39	18.3	15.6	9.8	8.3	15.8	7.2	12.7	2.9	8.4	0.0	0.0	100.00	61	3.34	3.23
40-44	12.4	11.9	7.8	11.5	8.2	17.7	13.2	3.9	6.8	5.7	0.9	100.00	62	4.05	3.89
45-49	9.3	12.7	6.5	14.9	12.2	9.4	5.5	4.1	8.2	4.2	13.0	100.00	66	4.72	4.35
Total	38.8	12.0	12.2	9.4	8.0	7.6	5.0	1.2	3.1	1.0	1.6	100.00	618	2.24	2.13
<b>CURRENTLY MARRIED WOMEN</b>															
15-19	*	*	*	*	*	*	*	*	*	*	*	100.00	21	0.61	0.53
20-24	25.0	19.1	33.6	18.3	2.9	1.0	0.0	0.0	0.0	0.0	0.0	100.00	76	1.58	1.45
25-29	24.6	10.0	18.2	19.1	12.3	15.8	0.0	0.0	0.0	0.0	0.0	100.00	69	2.32	2.22
30-34	14.7	4.1	17.4	9.1	14.9	17.4	16.4	1.1	4.9	0.0	0.0	100.00	71	3.58	3.44
35-39	16.4	12.7	9.7	9.4	17.3	8.2	12.4	3.3	9.6	0.0	1.0	100.00	54	3.57	3.45
40-44	(6.4)	(11.2)	(8.1)	(15.1)	(9.1)	(17.3)	(10.2)	(5.1)	(8.9)	(7.5)	(1.2)	100.00	47	4.44	4.30
45-49	(12.8)	(4.3)	(5.8)	(15.6)	(13.1)	(12.9)	(4.3)	(3.9)	(8.0)	(5.8)	(13.5)	100.00	48	4.94	4.59
Total	19.6	11.9	16.9	13.8	10.7	11.0	6.5	1.8	4.3	1.6	2.0	100.00	366	3.07	2.92

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25-49 unweighted cases.

**Figure 4.3: Mean number of children ever born**



Overall, the mean number of children ever born for all Nauruan women is 2.24. Married women had, on average, 3.07 children. The number of children currently being born to women in Nauru exceeds the mean for all women, because the category ‘all women’ includes those who are single, separated and widowed, and who are therefore less likely to have children.

The mean number of children ever born increases with women’s age. While women aged 15–19 had very few children, women aged 45–49 had 4.72 children, which is also called the completed fertility rate, a cohort measure demonstrating how many children a certain cohort of women who have completed their childbearing years actually produced during those years.

The data furthermore show that about 9 percent of women have had no children, which is an indication of voluntary or involuntary infertility.

#### **4.5 BIRTH INTERVALS**

A birth interval is defined as the length of time between two live births. The study of birth intervals is important in understanding the health status of young children. Research has shown that short birth intervals are closely associated with poor health in children, especially during infancy. Children born too close to a previous birth, especially if the interval between the births is less than two years, are at increased risk of health problems and dying at an early age. Longer birth intervals, on the other hand, contribute to the improved health status of both mother and child.

The study of birth intervals uses two measures: median birth interval and proportion of non-first births that occur with an interval of 24 months or more after the previous birth. Table 4.4 presents the distribution of second- and higher-order births in the five years preceding the survey by the number of months since the previous birth, according to background characteristics. The table also presents the median number of months since the preceding birth.

**Table 4.4: Birth intervals**

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Nauru 2007

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7–17	18–23	24–35	36–47	48–59	60+			
<b>Age</b>									
15–19	*	*	*	*	*	*	100.0	3	18.4
20–29	17.2	27.8	31.6	14.7	2.8	5.9	100.0	143	25.8
30–39	12.0	12.9	28.3	22.3	9.1	15.4	100.0	78	35.1
40–49	*	*	*	*	*	*	100.0	18	32.2
<b>Birth order</b>									
2–3	17.0	27.3	27.5	12.9	3.8	11.4	100.0	131	25.9
4–6	12.4	15.5	35.0	20.3	6.6	10.3	100.0	93	31.4
7+	*	*	*	*	*	*	100.0	18	30.9
<b>Sex of preceding birth</b>									
Male	14.3	19.6	35.8	13.4	4.9	12.0	100.0	126	28.9
Female	16.1	25.0	25.6	19.6	5.0	8.6	100.0	116	28.2
<b>Survival of preceding birth</b>									
Living	15.2	21.9	30.9	16.2	5.1	10.6	100.0	235	28.7
Dead	*	*	*	*	*	*	100.0	7	25.1
<b>Wealth quintile</b>									
Lowest	21.6	19.0	28.0	17.5	4.1	9.8	100.0	50	28.7
Second	14.6	27.5	31.3	8.3	9.0	9.4	100.0	50	26.3
Middle	12.4	15.5	31.2	25.0	5.5	10.5	100.0	51	33.0
Fourth	(15.5)	(27.0)	(33.5)	(17.5)	(0.0)	(6.5)	100.0	44	26.9
Highest	(11.5)	(22.7)	(31.0)	(13.5)	(5.8)	(15.6)	100.0	46	28.5
Total	15.2	22.2	30.9	16.4	5.0	10.4	100.0	241	28.5

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

Birth intervals in Nauru are relatively short with a median birth interval of 28.5 months. Factors that are likely to contribute to this short birth interval are discussed in other chapters. The relatively short period of postpartum amenorrhea, low percentage of women breast feeding, and the low proportion of current use of family planning among married women all contribute.

The median birth interval is substantially longer for mothers aged 30–39, and for birth orders 4–6.

#### 4.6 AGE AT FIRST BIRTH

The age at which childbearing commences is an important determinant of the overall level of fertility as well as the health and welfare of the mother and child. Early initiation into childbearing lengthens the reproductive period and, subsequently increases fertility. In some societies, postponement of first births due to an increase in age at marriage has contributed to the overall fertility decline. Table 4.5 shows the percentage of women who have given birth by specific ages, according to their age at the time of the survey.

Overall, the median age at first birth for women aged 25–49 is estimated to be 22 years. The median age at first birth is not calculated for those women at aged 15–24 because less than 50 percent of them were not mothers before reaching the beginning of age groups 15–19 and 20–24. In general, there is little variation in age at first birth among the different age groups. For

example, median age at first birth for women in the 25–29 age group is about 22.1 whereas for women in the 45–49 age it is 21.6.

**Table 4.5: Age at first birth**

*Percentage of women aged 15–49 who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, Nauru 2007*

Current age	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
	15	18	20	22	25			
<b>Age</b>								
15–19	0.7	na	na	na	na	89.2	117	a
20–24	0.7	21.5	39.3	na	na	47.9	131	a
25–29	0.0	13.4	36.3	49.2	65.3	30.4	96	22.1
30–34	0.0	17.6	34.1	56.0	63.6	22.0	85	21.1
35–39	0.0	20.4	32.6	45.1	61.6	18.3	61	23.0
40–44	2.9	18.8	28.3	48.9	73.0	12.4	62	22.2
45–49	0.0	18.2	32.9	54.7	82.7	9.3	66	21.6
20–49	0.5	18.4	34.8	na	na	27.1	501	21.9
25–49	0.5	17.3	33.2	51.0	68.7	19.7	371	21.9

na = not applicable

a = omitted because less than 50 percent of women had a birth before reaching the beginning of the age group

## 4.7 TEENAGE PREGNANCY AND MOTHERHOOD

Teenage pregnancy is a major health concern because of its association with higher morbidity and mortality for both the mother and child. Childbearing during teenage years also frequently has adverse social consequences, particularly on female educational attainment because women who become mothers in their teens are more likely to curtail their education.

Table 4.6 shows the percentage of women aged 15–19 who are mothers or who are pregnant with their first child. The results show that 15 percent of adolescent-aged females (15–19 years) have begun childbearing. About 11 percent have had a live birth and 4 percent are currently pregnant with their first child during the survey. However, caution should be exercised when interpreting teenage pregnancy because there might be cases where first pregnancies are under-reported.

**Table 4.6: Teenage pregnancy and motherhood**

*Percentage of women aged 15–19 who have had a live birth or who are pregnant with their first child and percentage who have begun childbearing, by background characteristics, Nauru 2007*

Background characteristic	Percentage who:		Percentage who have begun childbearing	Number of women
	Have had a live birth	Are pregnant with first child		
<b>Age</b>				
15	*	*	*	11
16	*	*	*	22
17	(5.7)	(17.7)	(23.4)	28
18	(17.1)	(0.0)	(17.1)	27
19	(15.5)	(0.0)	(15.5)	29
Total	10.8	4.2	15.0	117

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

## 4.8 KEY RESULTS

This section summarises the key findings of fertility levels and differences that are important to consider in future development planning and policy decisions towards population growth, and service delivery, including education and healthcare in Nauru. Nauru, like many other Pacific Island countries, experiences significant challenges associated with high fertility levels, the main source of high population growth. High population is often associated with socioeconomic problems, including high unemployment, urban growth with unplanned settlement practices, and poor environmental health.

The 2007 NDHS reported a fertility level of 3.4 births per woman, implying that on average a Nauruan woman would have three to four children by the time she ended her childbearing years if she were to pass through her childbearing years conforming to the ASFRs observed during this period. This translates into a 17 percent decline in the overall fertility level of 4.0 children per woman as estimated from the 2002 population census. However, with this decline, Nauru's fertility level is still above a replacement level of 2.1 births per woman. This means that couples are still having more children than needed for population replacement, resulting in population growth.

Other findings include:

1. ASFRs show that childbearing mostly occurs in women in the 20–24 year age group. There is a declining ASFR trend after this.
2. The mean number of children ever born for currently married woman is 3.07 births. The mean number of children increases with women's increasing age.
3. The median birth interval since the previous birth has been estimated at 29 months, which indicates that half of all births occur in a birth interval of less than three years.
4. The median age of women at first birth is 22 years, which implies that half of all births occur in women below this age.
5. By age 19, about one in five teenage girls has already begun bearing children.

## CHAPTER 5 FAMILY PLANNING

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This chapter describes and analyses information from the 2007 NDHS on contraceptive knowledge; past, current and future use of contraception; and attitudes pertaining to contraception. While the results primarily focus on women, some results from the male survey are discussed because men play an important role in reproductive health decision-making, and the realisation of reproductive health goals. Data on exposure to family planning messages through the media, sources and costs of contraception, contact with family planning providers, and husbands' attitude and knowledge about their wives' contraceptive use are also presented.

These topics are of practical use to policy and programme managers in formulating effective family planning strategies. One important indicator resulting from this survey is the percentage of married women, aged 15–49 years, who are currently using any method of contraception — referred to as the contraceptive prevalence rate.

### 5.1. KNOWLEDGE OF CONTRACEPTION

A major objective of the 2007 NDHS was to assess the level of knowledge of contraceptive methods among women and men. Individuals who have adequate information about the available contraceptive methods are better able to develop a rational approach to planning their families. The ability to spontaneously name or recognise a family planning method when it is described is a simple test of a respondent's knowledge, but is not necessarily an indication of willingness to use family planning. Information on knowledge of contraception was collected in the survey by asking female and male respondents to name ways or methods by which a couple could delay or avoid pregnancy. If the respondent failed to mention a particular method spontaneously, the interviewer described the method and asked whether the respondent had heard of it. Contraceptive methods are grouped into two types in Table 5.1. Modern methods include female sterilisation, male sterilisation, pill, intrauterine contraceptive device (IUD), injectables, implants, male condom, female condom, lactational amenorrhea method (LAM), and emergency contraceptives. Traditional methods include rhythm method (periodic abstinence), withdrawal and folk methods.

In Table 5.1, information about knowledge of contraceptive methods is presented for all women and men as well as for currently married and sexually active unmarried women and men by specific methods. Findings from the 2007 NDHS show that knowledge of at least one modern method of family planning in Nauru is almost universal among both women and men. The most widely known modern contraceptive methods among currently married women are male condoms (88 percent), pill (80 percent), injectables (75 percent), female sterilisation (67 percent), and IUD (59 percent). Twenty-six percent of married women knew about implants, 34 percent of women had heard of LAM, and 16 percent of women had heard of emergency contraception. This pattern is similar for all currently married and sexually active unmarried men, except that men are more likely than women to have heard of male and female condoms and are less likely to have knowledge about pills. Emergency contraception (15 percent) was the least known method among married and unmarried females, while LAM was the least known method among both married and unmarried males (4 percent).

Effective use of LAM means that a woman is exclusively or predominantly breastfeeding, is less than six months postpartum, is postpartum amenorrheic, and knows how to use another contraceptive method when any of the previous criteria do not hold.

**Table 5.1: Knowledge of contraceptive methods**

Percentage of all respondents, currently married respondents and sexually active unmarried respondents aged 15–49 who know any contraceptive method, by specific method, Nauru 2007

Method	Women			Men		
	All women	Currently married women	Sexually active unmarried woman <sup>1</sup>	All men	Currently married men	Sexually active unmarried men <sup>1</sup>
<b>Any method</b>	92.6	95.6	(95.2)	98.7	99.2	(100.0)
<b>Any modern method</b>	91.9	94.5	(95.2)	98.4	98.7	(100.0)
Female sterilisation	61.2	68.5	(60.6)	61.5	74.9	(53.6)
Male sterilisation	29.9	33.7	(33.1)	27.4	34.9	(25.8)
Pill	73.5	79.8	(66.7)	51.0	59.9	(54.5)
IUD	50.3	58.8	(39.3)	17.3	23.9	(17.5)
Injectables	65.4	72.5	(56.7)	28.8	36.6	(19.6)
Implants	22.5	25.7	(27.9)	9.0	10.4	(6.1)
Male condom	86.5	87.8	(90.2)	98.0	98.7	(100.0)
Female condom	27.7	26.7	(30.1)	35.5	34.4	(55.3)
Lactational amenorrhea (LAM)	29.1	34.0	(32.4)	4.4	6.6	(4.3)
Emergency contraception	15.0	15.5	(12.5)	13.4	16.1	(19.6)
<b>Any traditional method</b>	74.9	82.1	(70.9)	78.7	77.6	(89.0)
Rhythm	54.5	61.0	(42.0)	23.2	29.6	(25.9)
Withdrawal	61.6	69.7	(61.4)	76.3	74.0	(89.0)
Folk method	15.4	14.7	(20.9)	8.2	8.9	(10.5)
Mean number of methods known by respondents 15–49	5.9	6.5	5.7	4.5	5.1	4.8
Number of respondents	618	386	40	311	183	36
Mean number of methods known by respondents 15+	na	na	na	4.7	5.2	4.8
Number of respondents	na	na	na	354	216	36

Note: Figures in parentheses are based on 25–49 unweighted cases.

na = not applicable

<sup>1</sup> Had last sexual intercourse within 30 days preceding the survey.

Among sexually active unmarried women, few respondents had knowledge about emergency contraception, implants and female condoms. LAM and implants were reported to be the least known of modern family planning methods among active unmarried men.

A greater proportion of women and men knew of a modern contraceptive method than a traditional method. Knowledge of any traditional contraceptive method among all groups of women ranged between 70 percent and 83 percent. Reported knowledge of traditional methods was much higher among men (89 percent). The mean number of known contraceptive methods varied by the marital status of women and men, with the lowest number of methods (five) estimated for unmarried men while the highest (7 methods) was observed for married women.

The high level of knowledge could be attributed to the successful dissemination of family planning messages through outreach programmes and the revitalised family planning programme. Emergency contraception was the least known method among both married women and sexually active unmarried women. This may be attributed to the fact that emergency contraception is being newly introduced to the family planning programme. Wide knowledge of condoms is due to the expansion of the STI and HIV prevention programme.

## 5.2 KNOWLEDGE OF CONTRACEPTIVE METHODS BY BACKGROUND CHARACTERISTICS

Table 5.2 explores the level of knowledge about contraceptive methods for currently married women and men aged 15–49 who have heard of at least one contraceptive method or who have heard of at least one modern method by their background characteristics. The table is restricted to currently married women and men in order to facilitate comparison between subgroups.

**Table 5.2: Knowledge of contraceptive methods by background characteristics**

*Percentage of currently married women and currently married men aged 15–49 who have heard of at least one contraceptive method and who have heard of at least one modern method by background characteristics, Nauru 2007*

Background characteristic	Women			Men		
	Heard of any method	Heard of any modern method <sup>1</sup>	Number	Heard of any method	Heard of any modern method <sup>1</sup>	Number
<b>Age</b>						
15–24	97.8	97.8	98	100.0	(97.3)	32
25–29	95.1	94.0	69	100.0	(100.0)	40
30–34	94.0	94.0	71	100.0	(100.0)	39
35–39	(99.0)	(94.8)	54	95.2	(95.2)	30
40–49	92.9	91.5	95	100.0	(100.0)	43
<b>Education</b>						
Less than secondary	*	*	7	*	*	9
Secondary	95.5	94.6	353	100.0	99.5	160
More than secondary	(97.0)	(97.0)	26	*	*	14
<b>Wealth quintile</b>						
Lowest	94.2	94.2	62	*	*	23
Second	92.9	91.4	81	100.0	100.0	44
Middle	95.3	93.7	82	100.0	100.0	45
Fourth	96.3	94.2	82	100.0	97.2	31
Highest	99.0	99.0	79	100.0	100.0	41
Total 15–49	95.6	94.5	386	99.2	98.7	183
50+	na	na	na	95.7	95.7	33
Total men 15+	na	na	na	98.7	98.3	216

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

na = not applicable

<sup>1</sup> Female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, diaphragm, foam or jelly, lactational amenorrhoea method (LAM), and emergency contraception.

Family planning knowledge was measured against three characteristics: age, educational level and wealth. It was found that the level of knowledge exceeded 90 percent for married women and men. However, the 40–49 year age group of married women has a slightly lower level of knowledge of any method or any modern method; also, slightly lower levels of knowledge were reported for currently married men in the 35–39 age group. It was reported that the highest level of knowledge of any method is higher in the 35–39 age group. Those women and men with little education and those in the second lowest wealth quintile had slightly lower levels of knowledge of at least one contraceptive method.

### 5.3 EVER USE OF CONTRACEPTION: WOMEN AND MEN

Data on ever use of contraception has special significance because it reveals the cumulative success of programmes in promoting the use of family planning among couples. Ever use refers to the use of a method at any time, with no distinction between past and present use. In the 2007 NDHS, respondents who had heard of a family planning method were asked if they had ever used a method.

Table 5.3.1 shows the percentage of all women and currently married women who have ever used family planning methods, by specific method and age. About 64 percent of currently married women have used a contraceptive method, 52 percent have used a modern method, while 37 percent have used traditional methods. The most common methods of modern family planning that have ever used among currently married women were reported to be male condoms (23 percent), female sterilisation (13 percent) and injectables (12 percent). Negligible levels of use were reported for emergency contraception, male sterilisation and female condoms.

Among currently married women, use of any modern contraception during a lifetime was higher among younger women and lower among women aged 35 and older. There is a relationship between age and choice of methods. Male condoms were used more often among partners of younger married women aged 20–29, while pills were the preferred choice of older married women aged 35–39. Injectables were also common among younger currently married women, but usage declined by age 30 and over, indicating that younger currently married women were using this method for birth spacing rather than limiting the number of children.

The 2007 NDHS collected information on ever use of contraception for men as well, but with respect to four male methods only: male sterilisation, male condoms, rhythm method and withdrawal. As evident in Table 5.3.2, 68 percent of currently married men aged 15–49 have ever used a method in the past, with 56 percent having used an effective modern method, and 49 percent having used less effective traditional methods.

The most common methods used among men were male condoms and withdrawal. The methods least used were male sterilisation and rhythm. Contraceptive use among younger men aged 15–19 was lower (male condoms 38 percent, withdrawal 29 percent) than among slightly older men aged 20–24, which may be related to different levels of sexual activity between the two age groups.

**Table 5.3.1: Ever use of contraception: Women**

Percentage of all women, currently married women, and sexually active unmarried women aged 15–49 who have ever used any contraceptive method by method, according to age, Nauru 2007

Age	Modern method										Traditional method				Number of women	
	Any method	Any modern method	Female sterilisation	Male sterilisation	Pill	IUD	Injectables	Male condom	Female condom	LAM	Emergency contraception	Any traditional method	Rhythm	Withdrawal		Folk method
<b>ALL WOMEN</b>																
15–19	24.2	19.1	0.0	0.0	1.3	0.0	0.9	17.5	0.0	0.7	0.0	14.6	1.1	12.7	0.8	117
20–24	58.2	41.5	0.0	0.0	3.9	2.4	11.0	31.9	0.7	5.7	0.0	35.8	13.6	29.0	2.6	131
25–29	61.0	49.3	4.6	1.2	13.1	2.6	20.0	33.8	1.1	11.7	0.0	42.7	16.7	37.8	4.5	88
30–34	66.6	51.2	15.8	1.0	5.8	2.4	13.2	22.8	0.0	19.3	0.0	50.4	27.2	30.7	4.6	82
35–39	62.1	52.5	14.3	0.0	21.8	14.9	7.7	15.5	0.0	8.9	0.0	33.9	18.5	22.3	3.3	60
40–49	46.1	40.6	23.5	0.0	9.2	5.8	4.9	6.6	0.0	4.7	0.8	17.8	6.1	8.6	5.2	123
Total	51.5	40.9	9.2	0.5	8.0	3.8	9.1	21.6	0.3	7.7	0.2	31.5	12.8	23.1	3.3	618
<b>CURRENTLY MARRIED WOMEN</b>																
15–19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	21
20–24	69.0	50.5	0.0	0.0	5.0	4.0	18.9	34.0	1.2	8.8	0.0	37.7	12.4	31.8	2.3	76
25–29	66.6	55.0	5.9	1.5	12.2	1.1	20.9	34.9	1.4	15.1	0.0	46.8	16.6	40.4	5.8	69
30–34	69.3	56.2	18.3	1.1	5.5	2.8	13.3	25.3	0.0	21.3	0.0	51.4	31.4	30.0	3.9	71
35–39	62.0	51.3	15.9	0.0	21.4	16.7	7.2	11.5	0.0	9.9	0.0	35.7	18.4	22.7	3.6	54
40–49	52.7	46.5	26.9	0.0	10.2	7.4	4.6	6.1	0.0	4.5	1.0	18.7	5.2	10.2	5.9	95
Total	63.5	51.5	13.3	0.5	9.7	5.7	12.3	23.1	0.5	11.0	0.3	37.0	15.3	26.6	4.2	386
<b>SEXUALLY ACTIVE UNMARRIED WOMEN<sup>1</sup></b>																
Total	(50.7)	(40.1)	(6.0)	(3.1)	(7.7)	(0.0)	(4.5)	(29.8)	(0.0)	(4.4)	(0.0)	(35.1)	(14.6)	(30.1)	(2.0)	40

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

LAM = lactational amenorrhea method

<sup>1</sup> Women who had sexual intercourse within 30 days preceding the survey

**Table 5.3.2: Ever use of contraception: Men**

Percentage of all men aged 15–49 and above who have ever used any contraceptive method by method, according to age, Nauru 2007

Age	Any method	Any modern method	Modern method		Any traditional method	Traditional method		Number of men
			Male sterilisation	Male condom		Rhythm	With-drawal	
15–19	42.0	37.9	0.0	37.9	29.2	1.5	29.2	60
20–24	82.8	71.0	2.8	69.8	65.3	4.3	63.8	57
25–29	72.8	58.2	0.0	58.2	53.3	15.3	53.3	53
30–34	72.3	58.9	1.7	58.9	58.4	6.0	58.4	44
35–39	66.7	56.5	0.0	56.5	45.6	8.7	45.6	38
40–49	70.0	52.5	1.4	51.1	37.8	8.8	35.2	49
Total 15–49	68.4	55.5	1.0	55.0	49.3	7.4	48.4	311
50+	64.8	41.4	2.1	39.3	51.3	22.7	46.7	43
Total men 15+	68.0	53.8	1.1	53.1	49.5	9.2	48.2	354

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

**Figure 5.1: Proportion of all men and women who have ever used any method of contraception, Nauru 2007**

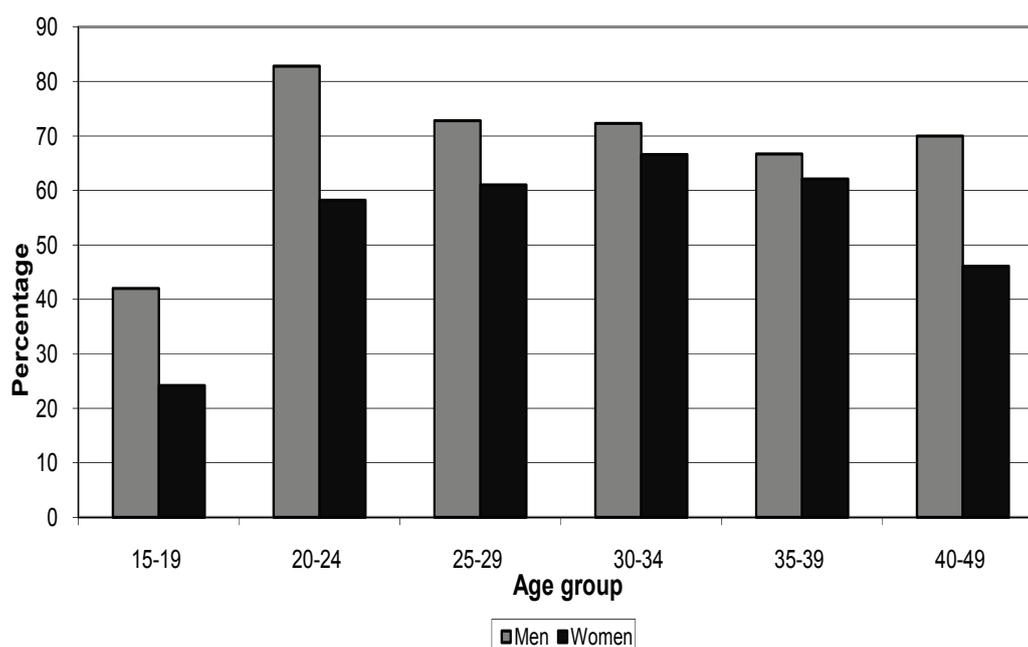


Figure 5.1 shows the proportion of all women and men who have ever used any method of family planning by age at the time of the 2007 NDHS. Generally, a higher proportion of currently married men have ever used any method of family planning for all ages as compared with women. Ever use of contraception varies with age for men and women. The pattern of ever use is curvilinear, with use being lowest among women in the youngest age group (15–19), increasing with age to a plateau among women in their 30s and 40s. The level of ever use of any method among all women rises to 67 percent among those aged 30–34, and then slightly declines as age increases. Among all women aged 15–19, only 24 percent reported having ever used any method, while 19 percent of these women in this age group reported having used any method. For men

aged 15–19, 38 percent reported having used any modern method and 42 percent for any method. Differences between age groups may reflect lifetime effects and/or genuine cohort change.

#### **5.4 CURRENT USE OF CONTRACEPTION BY AGE**

Current use of contraception is defined as the proportion of women who reported the use of a family planning method at the time of the interview. The level of current use — usually calculated among currently married women aged 15–49 — is the most widely used measure of the success of family planning programmes (referred to as the contraceptive prevalence rate). Furthermore, it can be used to estimate the reduction in fertility attributable to contraception. To collect information on current use of contraception among Nauruan women, respondents in the childbearing ages (15–49 years) were asked whether they were currently using any methods, and if so which methods they were using. All current methods that were used and reported from all women were then recorded. Table 5.4 shows the percent distribution of all women and currently married women who are currently using specific family planning methods by age. Similar information on current use was not collected for men.

Table 5.4 shows that approximately 36 percent of currently married women are using a family planning method, with 25 percent using a modern contraceptive method. The most commonly used modern method was female sterilisation (13 percent), followed by IUD (4 percent), male condoms (3 percent), injectables (2 percent) and LAM (2 percent). For traditional methods, the most commonly used were rhythm and withdrawal (about 5 percent for both methods). Use of other methods was reported as negligible.

Patterns of contraceptive use vary by age. Low contraceptive use in the 15–19 age group is expected as most young women are still in school and most are not sexually active. Contraceptive use increases in the 20–24 age group and further increases in women who are in their late 20s and 30s, and is maintained in the later reproductive years above 40.

**Table 5.4: Current use of contraception by age**

Percent distribution of all women, currently married women, and sexually active unmarried women aged 15–49 by contraceptive method currently used, according to age, Nauru 2007

Age	Modern method						Traditional method						Number of women	
	Any method	Any modern method	Female sterilisation	Male sterilisation	Pill	IUD	Injectables	Male condom	LAM	Any traditional method	Rhythm	Withdrawal		Folk method
<b>ALL WOMEN</b>														
15–19	8.5	3.8	0.0	0.0	0.7	0.0	0.9	1.6	0.7	4.7	1.1	3.6	0.0	91.5
20–24	20.8	10.2	0.0	0.0	0.7	0.0	3.1	5.6	0.8	10.5	5.1	5.5	0.0	79.2
25–29	30.0	18.3	4.2	0.0	3.3	0.8	0.0	5.5	4.4	11.7	3.9	5.6	2.2	70.0
30–34	34.4	23.8	15.1	0.9	1.5	1.4	1.8	0.6	2.4	10.6	5.6	5.0	0.0	65.6
35–39	38.8	31.4	15.7	0.0	0.0	10.5	2.1	3.2	0.0	7.4	5.8	0.0	1.6	61.2
40–49	35.9	31.0	23.7	0.0	0.0	5.0	0.7	1.0	0.7	4.9	2.6	0.9	1.4	64.1
Total	26.7	18.5	9.2	0.1	1.0	2.4	1.4	2.9	1.5	8.1	3.8	3.6	0.8	73.3
<b>CURRENTLY MARRIED WOMEN</b>														
15–19	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20–24	27.0	12.7	0.0	0.0	1.2	0.0	5.4	4.7	1.4	14.4	6.1	8.3	0.0	73.0
25–29	33.1	22.2	5.9	0.0	2.3	1.1	0.0	7.8	5.1	10.9	1.1	6.7	3.0	66.9
30–34	39.8	27.0	18.3	1.1	0.0	1.7	2.2	0.8	2.9	12.8	6.8	6.0	0.0	60.2
35–39	38.6	30.1	15.9	0.0	0.0	11.9	2.4	0.0	0.0	8.4	6.6	0.0	1.8	61.4
40–49	43.3	36.8	26.9	0.0	0.0	6.6	1.0	1.3	1.0	6.5	3.4	1.2	1.8	56.7
Total	35.6	25.1	13.3	0.2	0.6	3.8	2.3	2.8	2.1	10.5	4.7	4.5	1.2	64.4
<b>SEXUALLY ACTIVE UNMARRIED WOMEN<sup>1</sup></b>														
Total	(23.9)	(18.8)	(6.0)	(0.0)	(5.1)	(0.0)	(0.0)	(5.8)	(1.9)	(5.1)	(3.1)	(2.0)	(0.0)	(76.1)

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases. If more than one method is used, only the most effective method is considered in this tabulation.

LAM = lactational amenorrhea method

<sup>1</sup> Women who have had sexual intercourse within 30 days preceding the survey.

## **5.5 CURRENT USE OF CONTRACEPTION BY BACKGROUND CHARACTERISTICS**

The study of contraceptive use by background characteristics is important because it indicates which subgroups use family planning methods more commonly than others. This way, family planning programmes are informed about the need for targeted intervention for particular subgroups. Table 5.5 presents the percent distribution of married women by their current use of family planning methods, according to background characteristics. This table allows a comparison of contraceptive use among major population groups, and permits an examination of differences in the method mix among current users within various subgroups.

The relationship between education and contraceptive use is mixed. Use of modern methods is highest among women with a secondary education (26 percent) and lower among women with more than a secondary education (18 percent). This could be due to the very small number of cases for women with more than a secondary education. The most popular modern method among women with a secondary education is female sterilisation (13 percent), followed by IUD (4 percent) and male condoms (3 percent).

There is a direct association between the use of modern family planning methods and the number of children women have. Only 6 percent of women who have yet to have children use modern contraception; the percentage increases to 34 percent among women with three to four children, and to 46 percent among women with five or more children. As expected, permanent methods are popular among high-parity women. Use of female sterilisation increases with the number of living children a woman has. Approximately 32 percent of women with five or more children reported using female sterilisation. Injectables, male condoms and IUD are also more popular among women with one to four children. Injectables are more popular for a number of reasons: they're easily accessible because supplies are available at most health facilities; they work for a relatively long time; they are convenient to use; and their use can be kept private. Male condoms are more commonly used among women who have not yet had children.

Contraceptive use does not show a clear relationship with wealth quintiles. However, women in the fourth quintile were the most likely to use modern contraception (29 percent). The lowest quintile reported the least use of any modern contraception. Female sterilisation was popular among all levels of wealth quintiles. Women in the highest wealth quintile reported the highest use of female sterilisation and IUD.

**Table 5.5: Current use of contraception by background characteristics**

Percent distribution of currently married women aged 15–49 by contraceptive method currently used, according to background characteristics, Nauru 2007

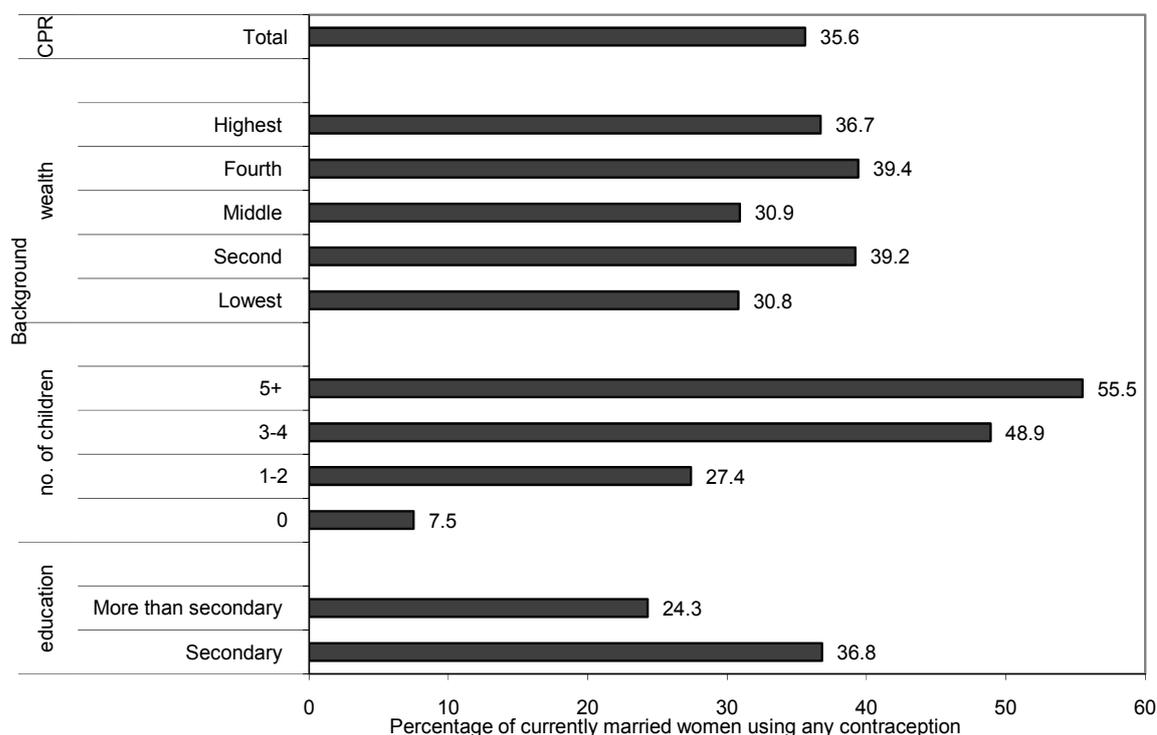
Background characteristic	Modern method						Traditional method				Total	Number of women		
	Any method	Any modern method	Female sterilization	Male sterilization	Pill	IUD	Injectables	Male condom	LAM	Any traditional method			Rhythm	Withdrawal
<b>Education</b>														
Less than secondary	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Secondary	36.8	26.1	13.3	0.2	0.7	4.0	2.5	3.0	2.3	10.7	5.0	4.4	1.4	63.2
More than secondary	(24.3)	(18.4)	(16.2)	(0.0)	(0.0)	(2.1)	(0.0)	(0.0)	(0.0)	(5.9)	(3.0)	(3.0)	(0.0)	(75.7)
<b>Number of living children</b>														
0	7.5	6.0	2.0	0.0	0.0	0.0	0.0	4.0	0.0	1.5	0.0	0.0	1.5	92.5
1–2	27.4	13.0	3.1	0.0	2.2	0.9	2.4	2.2	2.2	14.4	6.6	5.5	2.3	72.6
3–4	48.9	34.1	15.3	0.9	0.0	6.4	4.3	2.9	4.3	14.8	7.9	6.9	0.0	51.1
5+	55.5	46.3	32.2	0.0	0.0	7.8	2.2	2.3	1.7	9.1	3.4	4.7	1.0	44.5
<b>Wealth quintile</b>														
Lowest	30.8	21.5	10.8	0.0	0.0	1.8	2.9	4.9	1.2	9.3	3.7	2.8	2.8	69.2
Second	39.2	24.5	12.5	0.0	0.0	3.4	2.1	1.4	5.2	14.7	5.5	9.2	0.0	60.8
Middle	30.9	23.7	14.7	0.0	0.0	3.6	1.1	2.4	1.9	7.2	5.0	2.2	0.0	69.1
Fourth	39.4	28.9	12.6	1.0	3.1	3.0	1.5	5.6	2.2	10.5	4.1	4.1	2.3	60.6
Highest	36.7	26.2	15.2	0.0	0.0	6.8	4.1	0.0	0.0	10.5	5.2	3.8	1.5	63.3
Total	35.6	25.1	13.3	0.2	0.6	3.8	2.3	2.8	2.1	10.5	4.7	4.5	1.2	64.4

Note: If more than one method is used, only the most effective method is considered in this tabulation.

An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

LAM = lactational amenorrhea method

**Figure 5.2: Current use of contraception among currently married women by background characteristics, Nauru 2007**



## 5.6 NUMBER OF CHILDREN AT FIRST USE OF CONTRACEPTION

To determine the timing of the initiation of family planning in relation to childbirth, the 2007 NDHS asked all women about the number of living children they had when they first used family planning methods. Table 5.6 shows the distribution of women by age group and by the number of living children at first use of contraception. This table permits an analysis of cohort changes in parity at first use of contraception.

About 9 percent of all women first used a family planning method when they had four or more children, 21 percent of all women first used family planning at the time they had no children, and 9 percent first used it after the birth of their first child.

An important point of this table is cohort change in parity at first use of contraception. Younger women report first use of contraception at lower parities than older women, suggesting a shift toward the early use of contraception and the desire to delay childbearing among Nauruan women. For example, 32 percent of women aged 20–24 initiated use before having any children, compared with 16 percent of women aged 35–39. This may be because young women are more likely to use contraceptives to space apart births, whereas older women used them to limit births after they have reached high parities (4+ children).

**Table 5.6: Number of children at first use of contraception**

Percent distribution of women aged 15–49 by number of living children at the time of first use of contraception, according to current age, Nauru 2007

Current age	Never used	Number of living children at time of first use of contraception					Missing	Total	Number of women
		0	1	2	3	4+			
15–19	75.8	19.7	2.9	1.5	0.0	0.0	0.0	100.0	117
20–24	41.8	31.7	11.5	8.2	3.8	1.8	1.2	100.0	131
25–29	38.4	25.4	13.5	8.2	7.3	7.3	0.0	100.0	96
30–34	32.0	22.6	11.5	10.8	9.9	11.1	2.1	100.0	85
35–39	37.3	15.5	7.7	7.3	11.7	20.4	0.0	100.0	61
40–44	44.4	5.0	6.2	6.7	11.9	25.8	0.0	100.0	62
45–49	63.7	10.9	4.9	3.9	2.3	14.4	0.0	100.0	66
Total	48.5	20.7	8.6	6.6	5.9	9.2	0.5	100.0	618

## 5.7 KNOWLEDGE OF FERTILE PERIOD

An elementary knowledge of reproductive physiology provides a useful background for the successful practice of coitus-associated contraceptive methods such as withdrawal, periodic abstinence, LAM, condoms, and vaginal barrier methods. As shown in Tables 5.1, 55 percent of all women have heard of the rhythm method, Table 5.3.1 shows that 13 percent have ever used it in the past, and Table 5.4, shows that 4 percent are currently using this method. Table 5.7 shows a respondent's knowledge about the time during the menstrual cycle when a woman is most likely to get pregnant. This also shows that continuity of use of any method of contraception requires motivation and commitment.

**Table 5.7: Knowledge of fertile period**

Percent distribution of women aged 15–49 by knowledge of the fertile period during the ovulatory cycle, according to current use of the rhythm method, Nauru 2007

Perceived fertile period	Users of rhythm method	Non-users of rhythm method	All women
Just before her menstrual period begins	*	5.9	5.8
During her menstrual period	*	0.8	0.8
Right after her menstrual period has ended	*	26.0	25.9
Halfway between two menstrual periods	*	10.2	10.8
Other	*	1.0	1.1
No specific time	*	9.0	8.6
Don't know	*	46.5	46.6
Total	100.0	100.0	100.0
Number of women	23	595	618

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases.

Total includes 4 women with missing information on knowledge of fertile period who are not shown separately.

Overall, only 11 percent of women correctly reported the most fertile time as being halfway between two menstrual periods. Among all women, only 11 percent were able to correctly identify a woman's fertile period, while 26 percent reported that a woman's most fertile period follows immediately after menstruation has ended. Approximately 47 percent of all women do not know when their fertile period is, while 9 percent did not respond. Among non-users of the rhythm method, 26 percent stated that a woman is most susceptible to pregnancy just after her period has ended, 10 percent reported that the fertile period is halfway between the two menstrual periods. Unfortunately, a respondent's knowledge about the time during the menstrual cycle when a woman is most likely to get pregnant for users of the rhythm method could not be presented due to a very small sample size.

## 5.8 FUTURE USE OF CONTRACEPTION

An important indicator of the changing demand for family planning methods is the extent to which non-users of contraception plan to use family planning in the future. Currently married women who were not using contraception at the time of the survey were asked about their intention to use family planning in the future. The results are shown in Table 5.8. Among currently married women who were not using contraception, 28 percent reported that they intended to use a family planning method in the future, 64 percent said that they did not intend to use a method in the future, and 8 percent were unsure of their future intention. There were minor differences in the percentage of women who intend to use family planning according to their number of living children. The proportion of women intending to use family planning methods peaked at 28 percent among non-users with one child, and then declined to 27 percent among women with four or more children.

Intention to use contraception in the future provides a forecast of potential demand for services and acts as a convenient summary indicator of disposition toward contraception among current non-users. Respondents may or may not adhere to their intentions for future use.

**Table 5.8: Future use of contraception**

*Percent distribution of currently married women aged 15–49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Nauru 2007*

Intention	Number of living children <sup>1</sup>					Total
	0	1	2	3	4+	
Intends to use	19.6	(28.1)	(33.2)	(38.2)	26.7	27.6
Unsure	7.4	(8.1)	(6.6)	(6.4)	8.1	7.5
Does not intend to use	73.0	(63.8)	(55.3)	(55.4)	65.1	64.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	62	46	38	32	70	248

Note: Figures in parentheses are based on 25–49 unweighted cases.

Total includes two women with missing information on intention to use in the future, for whom data are not shown separately.

<sup>1</sup> Includes current pregnancy.

## 5.9 REASONS FOR NOT USING CONTRACEPTION

The various reasons that women give for not using family planning methods reflect differences in values and beliefs and individual circumstances. This information is critical for designing programmes aimed at improving contraceptive use and may allude to a number of programme areas such as community education, providers' attitudes, access to services, and quality of services. Table 5.9 shows the percent distribution of currently married women who are not using a contraceptive method and who do not intend to use it in the future, and the main reasons for not intending to use.

Approximately 51 percent of women do not intend to use contraception in the future because of fertility-related personal choices. Most of these women want as many children as possible (27 percent). One in every four currently married women (25 percent) do not intend to use contraception because of opposition to use, with most of them citing respondent opposition to use any methods as a reason for non-use. About 16 percent of women also cited method-related reasons, primarily fear of side effects (9 percent), as a major reason for non-use in the future. About 6 percent of women reported a lack of knowledge as a reason for not intending to use contraception in the future; of which 5 percent cited lack knowledge about methods.

Overall, these data suggest that there is substantial scope for strengthening family planning programmes to increase contraceptive use and includes formulating and reviewing family planning policy, review of quality of care, capacity of service providers, access to services, community education and advocacy for family planning as a key tool for improving family health

socioeconomic well-being. The reasons volunteered by respondents should be the basis for further exploration for formulating targeted interventions. Improved information and educational activities will play an important role in dispelling fears and misconceptions about specific contraceptive methods and contraceptive use in general.

**Table 5.9: Reason for not intending to use contraception in the future**

*Percent distribution of currently married women aged 15–49 who are not using contraception and who do not intend to use in the future by main reason for not intending to use, Nauru 2007*

<b>Reason</b>	<b>Percent distribution</b>
<b>Fertility-related reasons</b>	
Infrequent sex/no sex	2.1
Menopausal/had hysterectomy	6.6
Subfecund/ infecund	15.2
Wants as many children as possible	27.3
<b>Opposition to use</b>	
Respondent opposed	12.5
Husband/partner opposed	0.6
Religious prohibition	11.6
<b>Lack of knowledge</b>	
Knows no method	4.8
Knows no source	1.1
<b>Method-related reasons</b>	
Health concerns	2.4
Fear of side effects	9.2
Inconvenient to use	1.1
Interfere with body's normal process	3.2
<b>Other</b>	0.6
<b>Don't know</b>	1.2
Total	100.0
Number of women	159

Note: Total includes one woman with missing information on reason not to use contraception in the future, for whom data are not shown separately.

## 5.10 PREFERRED METHOD OF CONTRACEPTION FOR FUTURE USE

Future demand for specific family planning methods can be assessed by asking non-users who intend to use them in the future which methods they prefer to use. Table 5.10 provides some indication of currently married women's preferences for the method they might use in the future. However, the information should be interpreted with caution because two conditions are implied here: intention to use and method preferred if intention is followed. Most currently married women would prefer to use periodic abstinence (23 percent) and condom use (19 percent) in the future. Approximately 14 percent of women mentioned female sterilisation and withdrawal as a potential future method, and 12 percent mentioned injectables.

**Table 5.10: Preferred method of contraception for future use**

*Percent distribution of currently married women aged 15–49 who are not using a contraceptive method but who intend to use one in the future by preferred method, Nauru 2007*

<b>Method</b>	<b>Percent distribution</b>
Female sterilisation	14.2
Pill	6.8
IUD	6.6
Injectables	12.0
Condom	19.0
Diaphragm	1.3
Lactation amenorrhea	1.5
Periodic abstinence	22.5
Withdrawal	13.6
Unsure	2.5
Total	100.0
Number of women	69

## **5.11 EXPOSURE TO FAMILY PLANNING MESSAGES**

Electronic media such as radio and television are important for communicating messages about family planning. Information on the level of exposure to such media is important for programme managers and planners to effectively target population subgroups for information, education and communication campaigns. To assess the extent to which media serve as a source of family planning messages, respondents were asked if they had heard or seen a message about family planning on the radio, television or in the print media (newspaper, magazine, poster) in the months preceding the survey. The results are shown in Table 5.11.

In Nauru, the most common media sources are newspapers and/or magazines and television for both women and men. Men were more likely to be exposed to family planning messages than women through these media. Exposure to family planning messages on the radio was low. Only 4 percent of women and 14 percent of men had heard about family planning via radio.

In general, a respondent's exposure to media messages on family planning by various methods differs with age. Younger women aged 15–19 were least likely to have been exposed to family planning messages on the radio while men in the same age group had slightly higher exposure via radio. On the other hand, women aged 35–39 were more likely to get media messages through newspapers and/or magazines. Men aged 40–44 were more likely to get media messages through the three main media sources (radio, television and newspaper and/or magazines) than men of other ages.

**Table 5.11: Exposure to family planning messages**

*Percentage of women and men aged 15–49 who heard or saw a family planning message on the radio or television or in a newspaper in the past few months, according to background characteristics, Nauru 2007*

Background characteristic	Women				Men				
	Radio	Television	Newspaper/ magazine	None of these three media sources	Radio	Television	Newspaper/ magazine	None of these three media sources	Number
<b>Age</b>									
15–19	0.8	6.3	11.4	84.8	2.4	16.4	13.5	74.6	60
20–24	2.6	13.9	27.8	68.9	4.9	27.7	9.4	66.1	57
25–29	2.6	6.6	20.9	76.8	17.9	34.7	31.3	48.8	56
30–34	3.6	9.4	23.5	75.4	(15.1)	(25.3)	(28.3)	(58.9)	48
35–39	6.8	12.7	32.2	62.4	(11.8)	(24.7)	(37.4)	(47.4)	39
40–44	5.0	8.0	13.0	81.6	(35.4)	(48.6)	(44.4)	(39.4)	27
45–49	7.0	4.4	16.5	78.7	(30.3)	(32.3)	(36.5)	(50.4)	23
<b>Education</b>									
Less than secondary	*	*	*	*	*	*	*	*	20
Secondary	3.0	8.7	20.3	76.3	12.4	30.5	25.7	56.9	270
More than secondary	10.1	14.6	31.3	63.0	*	*	*	*	21
<b>Wealth quintile</b>									
Lowest	0.7	6.3	16.1	80.9	(20.1)	(37.2)	(26.3)	(58.8)	45
Second	4.2	9.3	21.5	72.4	14.9	22.9	26.9	61.6	67
Middle	0.8	7.4	17.7	78.8	7.9	19.0	25.1	65.5	64
Fourth	7.0	7.4	22.5	76.6	10.6	20.5	25.0	57.8	64
Highest	5.4	14.7	26.6	69.5	16.9	42.6	25.4	46.0	72
Total 15–49	3.5	9.0	20.8	75.7	13.8	28.2	25.7	57.6	311
50+	na	na	na	na	(36.1)	(35.2)	(43.3)	(37.0)	43
Total men 15+	na	na	na	na	16.5	29.1	27.8	55.1	354

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.  
na = not applicable

Education level influences media exposure positively, as the level of exposure to family planning messages increases with increasing level of education. For example, only 20 percent of women with a secondary education had exposure to family planning information by reading magazines and/or newspapers compared with 31 percent with more than a secondary education. On the other hand, women in different wealth quintiles do not show any consistency in the level of family planning exposure through these media.

## 5.12 CONTACT OF NON-USERS WITH FAMILY PLANNING PROVIDERS

When family planning providers visit women in the field or when women visit health facilities, family planning fieldworkers and health providers are expected to discuss family planning issues and available contraception options, and to motivate non-users to adopt a family planning method. To gain insight into the level of contact between non-users and health workers, women were asked if a family planning fieldworker had visited them and discussed family planning issues during the 12 months preceding the survey. In addition, women were asked if they had visited a health facility in the 12 months preceding the survey for any reason, and whether anyone at the facility had discussed family planning with them during the visit.

Table 5.12 shows that fieldworkers discussed family planning with only 5 percent of non-users during the 12 months preceding the survey. At the same time, only 7 percent of non-users discussed family planning at a health facility. One of the reasons for the low exposure to family planning from fieldworkers is the lack of emphasis on home visits. This low level of contact of non-users with family planning providers varies by background characteristics. The highest percentages (96 percent) of women who neither discussed family planning with fieldworkers or at a health facility were noted among the youngest age group.

Overall, 89 percent of women who could have been exposed to family planning information did not discuss family planning during a field visit or at a health facility, indicating numerous missed opportunities to inform and educate women about family planning.

**Table 5.12: Contact of non-users with family planning providers**

*Among women aged 15–49 who were not using contraception, the percentage who during the last 12 months were visited by a fieldworker who discussed family planning, the percentage who visited a health facility and discussed family planning, the percentage who visited a health facility but did not discuss family planning, and the percentage who neither discussed family planning with a fieldworker nor at a health facility, by background characteristics, Nauru 2007*

Background characteristic	Percentage of women who were visited by fieldworker who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who:		Percentage of women who neither discussed family planning with fieldworker nor at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
<b>Age</b>					
15–19	2.5	1.2	11.6	96.3	107
20–24	4.0	8.3	36.1	87.7	103
25–29	7.9	11.2	42.4	81.0	67
30–34	2.4	9.7	34.0	88.8	56
35–39	(8.1)	(11.2)	(23.1)	(83.8)	37
40–44	(5.6)	(6.7)	(40.9)	(87.7)	35
45–49	(5.3)	(0.0)	(43.1)	(94.7)	47
<b>Education</b>					
Less than secondary	*	*	*	*	12
Secondary	4.0	5.9	29.7	90.2	402
More than secondary	(12.6)	(12.2)	(43.4)	(78.2)	39

**Table 5.12 (Continued)**

<b>Wealth quintile</b>					
Lowest	3.8	2.5	33.0	93.7	99
Second	8.0	7.8	28.3	86.0	92
Middle	1.2	9.1	26.1	89.7	98
Fourth	5.8	6.0	37.2	88.2	80
Highest	4.8	7.2	31.6	88.0	85
Total	4.6	6.5	31.0	89.3	453

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

### 5.13 HUSBAND'S KNOWLEDGE OF WIFE'S USE OF CONTRACEPTION

Use of family planning methods is facilitated when couples discuss and agree on the issue. To assess the extent to which women use contraception without telling their partners, the 2007 NDHS asked married women whether their husbands or partners knew whether they were using a family planning method or not.

Table 5.13 shows that the vast majority of women (85 percent) say their husbands know that they are using contraception, an indication where men have full knowledge of family planning and where they play an important role in planning the number of children they wish to have.

On the other hand, very few women (6 percent) stated they are practicing family planning without their husband's knowledge.

**Table 5.13: Husband/partner's knowledge of women's use of contraception**

*Among currently married women aged 15–49 who are using a method, percent distribution by whether they report that their husbands/partners know about their use, according to wealth quintile, Nauru 2007*

<b>Wealth quintile</b>	<b>Knows<sup>1</sup></b>	<b>Does not know</b>	<b>Unsure whether knows/missing</b>	<b>Total</b>	<b>Number of women</b>
Lowest	*	*	*	100.0	19
Second	88.9	2.9	8.2	100.0	32
Middle	90.3	3.6	6.1	100.0	25
Fourth	87.7	6.9	5.3	100.0	32
Highest	74.4	7.6	18.0	100.0	29
Total	85.0	5.8	9.1	100.0	137

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

<sup>1</sup> Includes women who report use of male sterilisation, male condoms or withdrawal.

### 5.14 KEY RESULTS

The contraceptive prevalence rate in Nauru is 36 percent, which means that about two in every five currently married women reported using any family planning methods at the time of the survey. This indicator is the most widely used measure of the success and effectiveness of family planning programmes and services in the country. The results indicate that the majority of currently married women were not applying any contraceptive methods to control their number of children, which will have the following impacts on Nauru's population and development planning and policies:

- Contribute to high level of fertility and to the poor health status of both mother and child.
- Contribute to high population growth, which is always associated with socioeconomic problems.

The following results might also help explain why the contraceptive prevalence rate is not as expected. These findings could be considered in future family planning strategies to help increase the use of family planning methods in Nauru.

- About 16 percent of currently married women who are not using contraception and who do not intend to use it in the future reported that the reason for not intending to use contraception in the future is method-related. These women were not intending to use any contraception because they were afraid of the side effects of the method on their health. Counselling is needed for these women. Service providers need to be trained to become more competent in discussing minor side effects with clients.
- A very low proportion of women and men have been exposed to family planning messages via media such as radio, television and newspapers or magazines.
- There is a low level of contact of non-users with family planning providers, and a lack of emphasis on discussing family planning issues during home visits on the part of family planning fieldworkers. Family planning needs to be integrated with other maternal and child health, and reproductive health activities.

Policy implications for health services, especially family planning programmes can include:

- Increase contraceptive use by providing advocacy and high-quality services for family planning.
- Improve information and educational activities, which will play an important role in dispelling fears and misconceptions about specific contraceptive methods and contraceptive use in general.
- Increase (free) access to family planning methods that individuals can obtain when required.
- Maintain the supply of methods at all levels in order to meet current and future use of methods.
- Provide training and counselling at community and individual levels on the importance and advantage of family planning.
- Involve men and husbands in decisions about family planning so that they will see family planning as a shared responsibility.

## CHAPTER 6 OTHER PROXIMATE DETERMINANTS OF FERTILITY

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This chapter explores the principal factors, other than contraception, that affect a woman's chances of becoming pregnant. These are referred to as other proximate (or direct) determinants of fertility, and include marriage and sexual intercourse, postpartum amenorrhea and abstinence from sexual relations, and secondary infertility, menopause. These factors interact and influence each other and affect fertility levels and trends.

The DHS looked at nuptiality because marriage is the leading indicator of a woman's exposure to the risk of pregnancy; therefore, understanding nuptiality is important for understanding fertility. Marriage here refers to unions that are recognised by civil and religious laws, as well as by the community. In most societies, marriage sanctions childbearing, and married women are exposed to a greater risk of becoming pregnant than unmarried women. Thus, women in populations in which age at marriage is low tend to start childbearing early and have a high fertility level. For this reason, this chapter explores the trends in age at marriage. This chapter also includes information on more direct measures of the beginning of exposure to pregnancy and the level of exposure, namely, age at first sexual intercourse and the frequency of intercourse. Finally, measures of several other proximate determinants of fertility, which, like marriage and sexual intercourse, influence exposure to the risk of pregnancy, are presented. These include duration of postpartum amenorrhea, postpartum abstinence, and secondary infertility (also known as menopause).

### 6.1 CURRENT MARITAL STATUS

Respondents' marital status at the time of the survey is presented in Table 6.1 and Figure 6.1. In Table 6.1, the term 'married' includes legal or formal marriage, while 'living together' designates an informal union. However, in this report, these two categories are combined and referred to collectively as 'currently married' or 'currently in union — living together'. Respondents who were widowed, divorced, or not living together (separated) made up the remainder of the 'ever-married' or 'ever-in-union' category.

Table 6.1 shows that the percentage of women in union was 62 percent compared with 59 percent of men. Of those women currently in union, 10 percent were living with a partner, while 53 percent were observed to be married. Similarly, of the 59 percent of men in union at the time of the 2007 NDHS, 10 percent were living with a partner compared with 49 percent who were married. The results generally show that in their teen years, most Nauruan women and men opt not to get married but to instead live together; then as they grow older, most will likely decide to get married. For instance, the proportion of married women and married men in the 15–19 age category are much lower than for those in the living together status. This distribution changes in the older age categories as women and men most likely decide to permanently get married.

The results from Table 6.1 also show that less than 5 percent of young people aged 15–19 were married rather than in a living-together arrangement. For example, 12 percent of young women aged 15–19 were in a living-together union compared with only 6 percent who were married. This number remains constant for women in a living-together status up to age 30 compared with rapid increases in the proportion of woman marrying in Nauru. In contrast, young Nauruan men (aged 15–19) had a slow start to martial union with about 9 percent entering into a living-together arrangement, while none were in a married union. In the 20–24 age group, the proportion of men in a living-together arrangement increased to 17 percent, and to 30 percent in a married union.

The results of the 2007 NDHS also show that divorce is not a real problem for Nauruan women and men, however, separation appears to be higher among women (5 percent) than among men (2 percent). For Nauruan women who are separated, this 5 percent is not equally distributed among all age groups (see appropriate columns in Table 6.1 and Figure 6.1). Nauruan women in the 25–29 age group were more likely to be separated than women in other age groups. In contrast, teenage men were more likely to be separated from their partners than men in other age groups.

With respect to widowhood, more women than men aged 40 and over were widowed. This is expected because the average life expectancy of men is usually lower than that for females.

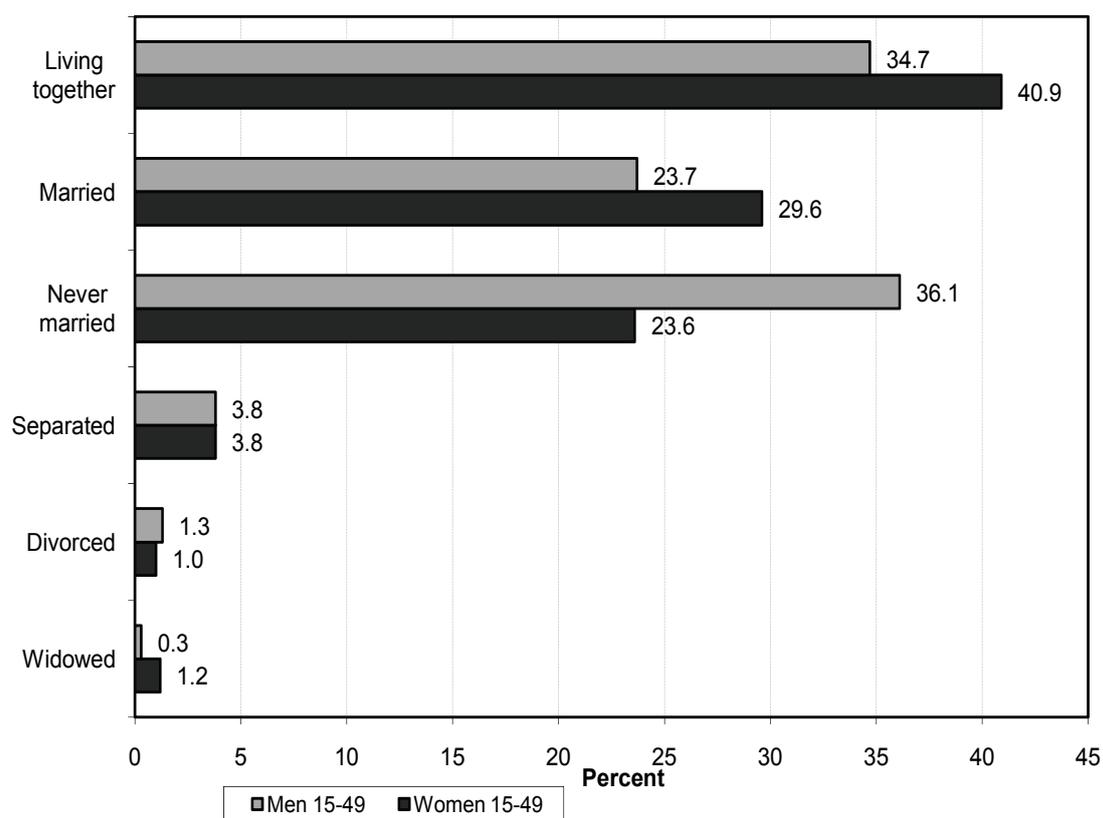
**Table 6.1: Current marital status**

*Percent distribution of women and men aged 15–49 by current marital status, according to age, Nauru 2007*

Age	Marital status						Total	Percentage of respondents currently in union	Number of respondents
	Never married	Married	Living together	Divorced	Separated	Widowed			
<b>WOMEN</b>									
<b>Age</b>									
15–19	79.8	6.3	12.0	0.0	1.8	0.0	100.0	18.4	117
20–24	38.4	45.9	12.4	0.0	3.3	0.0	100.0	58.3	131
25–29	17.3	59.0	12.1	0.0	9.0	2.6	100.0	71.2	96
30–34	9.5	77.9	4.8	0.0	5.6	2.3	100.0	82.7	85
35–39	9.0	83.0	5.1	0.0	2.9	0.0	100.0	88.1	61
40–44	7.6	62.8	13.5	1.2	5.8	9.1	100.0	76.3	62
45–49	11.7	68.4	4.3	1.1	4.1	10.4	100.0	72.7	66
Total 15–49	30.1	52.7	9.8	0.2	4.5	2.7	100.0	62.4	618
<b>MEN</b>									
<b>Age</b>									
15–19	89.6	0.0	8.6	0.0	1.9	0.0	100.0	8.6	60
20–24	53.2	29.5	17.3	0.0	0.0	0.0	100.0	46.8	57
25–29	27.5	61.7	9.3	0.0	1.5	0.0	100.0	71.0	56
30–34	(14.4)	(72.3)	(7.3)	(0.0)	(5.0)	(0.9)	100.0	(79.6)	48
35–39	(21.2)	(73.9)	(2.9)	(0.0)	(2.1)	(0.0)	100.0	(76.7)	39
40–44	(5.8)	(81.6)	(4.7)	(0.0)	(0.0)	(7.9)	100.0	(86.3)	27
45–49	(12.9)	(59.4)	(24.0)	(0.0)	(0.0)	(3.6)	100.0	(83.5)	23
Total 15–49	38.3	48.7	10.2	0.0	1.7	1.1	100.0	58.9	311
50+	(5.2)	(74.9)	(2.6)	(0.0)	(3.3)	(13.9)	100.0	(77.5)	43
Total men 15+	34.3	51.8	9.3	0.0	1.9	2.7	100.0	61.1	354

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

**Figure 6.1: Current marital status of women and men**



## 6.2 AGE AT FIRST MARRIAGE

Whether or not the start of marriage coincides with the initiation of sexual intercourse, and thus, the beginning of exposure to the risk of pregnancy, first marriage is an important social and demographic indicator and, in most societies, represents the point in a woman’s life when childbearing is acceptable. Note that in Table 6.2, ‘married’ includes ‘living together’. In this table, the age at first marriage is defined as the age at which the respondent began living with her/his first spouse or partner.

Marriage is a leading social and demographic indicator of women’s exposure to the risk of pregnancy, especially in the case of low levels of contraceptive use. Populations in which age at marriage is low tend to be populations with early childbearing and high fertility. Table 6.2 presents the percentage of women and men who were married by specific ages, and the median age at first marriage, according to respondents’ age at the time of the survey.

Trends in age at marriage by people in different age groups are described by comparing the cumulative distribution for successive younger age groups. In drawing conclusions concerning trends, data for the oldest age group are interpreted cautiously because respondents may not recall dates or ages at marriage with accuracy.

For each group, the accumulated percentages stop at the lower age boundary of the cohort to avoid censoring problems. For instance, for the 20–24 age group, accumulation stops with the percentage married by exact age 20.

As a measure of central tendency, the median age at marriage is used. The median here is defined as the age by which half of the cohort has married, not the age by which half of those married have started living with their spouse. The median is preferred over the mean as a measure of central tendency, because, unlike the mean, it can be estimated for all age groups where at least half are ever married at the time of survey.

The median age at first marriage for men and women aged 20–49 was 22.8 for men and 21.2 for women. Although the minimum legal age in Nauru for a woman to get married is 18, marriage among young girls is a common practice. Among women aged 20–49, 3 percent were married by age 15, 23 percent were married by age 18, and 43 percent were married by age 20. However, the trend is shifting toward fewer women marrying at very young ages, as only 3 percent of women aged 15–19 were married before age 15 compared with 6 percent of women aged 40–44.

**Table 6.2: Age at first marriage**

*Percentage of women and men aged 15–49 who were first married by specific exact ages and median age at first marriage, according to current age, Nauru 2007*

Current age	Percentage first married by exact age:					Percentage never married	Number	Median age at first marriage
	15	18	20	22	25			
<b>WOMEN</b>								
<b>Age</b>								
15–19	3.5	na	na	na	na	79.8	117	10.8)
20–24	1.9	26.8	42.7	na	na	38.4	131	na
25–29	2.4	17.1	45.3	56.1	76.2	17.3	96	21.1
30–34	6.3	30.6	52.1	63.2	79.9	9.5	85	19.8
35–39	1.3	17.7	36.8	56.5	73.3	9.0	61	21.3
40–44	6.3	29.7	41.2	54.7	69.0	7.6	62	21.3
45–49	0.0	15.7	32.9	50.0	72.8	11.7	66	22.0
20–49	3.0	23.4	42.6	na	na	18.5	501	21.2
25–49	3.3	22.2	42.6	56.5	74.7	11.5	371	21.2
<b>MEN</b>								
<b>Age</b>								
15–19	a	na	na	na	na	89.6	60	12.8)
20–24	a	12.3	25.4	na	na	53.2	57	(1.8)
25–29	a	17.7	41.0	51.8	68.2	27.5	56	21.6
30–34	a	7.5	27.5	46.1	58.4	14.4	48	22.5
35–39	a	27.4	46.2	48.1	58.7	21.2	39	23.0
40–44	a	7.1	23.5	44.2	61.7	5.8	27	23.3
45–49	a	6.5	22.4	50.8	75.2	12.9	23	22.0
20–49	a	13.8	32.0	46.6	59.9	26.2	252	22.8
25–49	a	14.3	34.0	48.4	63.8	18.2	194	22.3
25+	a	14.4	33.0	46.7	61.7	15.8	237	22.7

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.

na = not applicable due to censoring.

a = omitted because less than 50 percent of the women/men married for the first time before reaching the beginning of the age group.

Marriage among men on the other hand starts fairly late. Among men aged 20–49, none had married by age 15, and only 14 percent had married by age 18. By age 20, 32 percent of men have been married, compared with 43 percent of women. According to the 2007 NDHS, the median age at first marriage for men aged 20–49 was 23, about two years later than the median age for women.

### 6.3 AGE AT FIRST SEXUAL INTERCOURSE

The 2007 NDHS collected data on age at first sexual intercourse. The median age at first sexual intercourse for women aged 20–49 was 17.6 years. By age 15, 13 percent of women aged 20–49 were already sexually active, and 55 percent were sexually active by age 18 (Table 6.3). The cumulative percentage of sexually active women increased steadily, reaching 79 percent by age 20.

**Table 6.3: Age at first sexual intercourse**

Percentage of women and men aged 15–49 who had first sexual intercourse by specific exact ages, percentage who never had intercourse, and median age at first intercourse, according to current age, Nauru 2007

Current age	Percentage who had first sexual intercourse by exact age					Percentage who never had intercourse	Number	Median age at first intercourse
	15	18	20	22	25			
<b>WOMEN</b>								
<b>Age</b>								
15–19	14.9	na	na	na	na	45.9	117	a
20–24	14.8	65.8	85.7	na	na	6.5	131	17.0
25–29	17.8	55.5	85.7	94.8	96.8	0.0	96	17.5
30–34	14.9	52.4	80.0	87.1	90.9	1.8	85	17.7
35–39	8.7	56.4	80.4	89.1	94.3	0.0	61	17.3
40–44	5.3	36.9	55.8	75.3	82.9	0.0	62	19.1
45–49	10.7	51.7	72.2	82.9	90.0	0.0	66	17.9
20–49	12.9	55.0	78.6	87.5	91.4	2.0	501	17.6
25–49	12.3	51.2	76.1	na	na	0.4	371	17.9
15–24	14.8	na	na	na	na	25.1	247	17.4
<b>MEN</b>								
<b>Age</b>								
15–19	34.8	na	na	na	na	32.7	60	a
20–24	27.6	80.1	94.4	na	na	1.2	57	16.4
25–29	32.4	68.9	75.1	82.2	82.2	0.0	56	16.1
30–34	20.8	63.1	81.9	86.0	87.7	0.0	48	17.1
35–39	19.8	64.8	71.1	73.4	78.5	0.0	39	16.7
40–44	22.3	75.4	83.2	89.4	89.4	2.8	27	16.4
45–49	12.1	48.8	64.2	64.2	64.2	0.0	23	18.3
20–49	24.2	68.5	80.1	83.9	85.0	0.6	252	16.6
25–49	23.1	65.1	75.8	na	na	0.4	194	16.7
15–24	31.3	na	na	na	na	17.3	117	16.5
20+	24.0	68.5	79.6	na	na	0.5	294	16.6
25+	23.2	65.6	76.0	80.3	81.5	0.3	237	16.7

na = not applicable due to censoring.

a = omitted because less than 50 percent of respondents had intercourse for the first time before reaching the beginning of the age group.

Unlike marriage, sexual activity among men starts earlier than among women. For instance, 24 percent of men aged 20–49 were sexually active by age 15 (compared with 13 percent of women). With women, this percentage increased steadily, reaching 80 percent by age 20. The median age at first sexual intercourse for men aged 20–49 years was 16.6 years compared with 17.6 years for women. As was the case with women, the median age for men calculated from the 2007 NDHS shows no evidence of change over time.

Note that the median age in the above tables is defined as the exact age by which 50 percent of an age group had sexual intercourse for the first time. The table is used to describe differentials in age at first intercourse between males and females and to examine differences by age groups.

#### 6.4 RECENT SEXUAL ACTIVITY

In societies with low contraceptive use, the probability of a woman becoming pregnant is closely related to her exposure to and frequency of sexual intercourse. Information on recent sexual activity is therefore a useful measure of a woman's exposure to the risk of pregnancy. The 2007 NDHS asked women and men about the timing of their last sexual intercourse. Tables 6.4.1 and 6.4.2 present the percent distribution of women and men by the timing of last sexual intercourse,

according to their background characteristics. Respondents are considered to be sexually active if they have had sexual intercourse at least once in the four weeks preceding the survey.

Among women aged 15–49, almost half (49 percent) were sexually active in the four weeks prior to the survey, while 21 percent had had sex within the past year but not in the four weeks prior to the survey. About 12 percent of women in this age category had ever had sex but were not sexually active in the past 12 months. The highest level of recent sexual activity was observed among women aged 25–44, of whom 56–68 percent were sexually active in the past month. The proportion of women who were sexually active does appear to decline as age increases; however, their level of sexual activity was maintained at over 50 percent as age increased, and declined after age 44. Similarly, the proportion of women in a marital union who were sexually active in the four weeks preceding the survey does not appear to have declined. A consistently high proportion (over 60 percent) of women who were married or living together were sexually active in the four weeks prior to the 2007 NDHS. Women who were married in the past or had never been married were quite likely to have had sex in the recent past (see Table 6.4.1). The results also indicate that sexual activity occurred outside the marriage and living-together union. Women in higher wealth quintile households were more likely to have had sex in the past four weeks than those in lower wealth quintile households.

Overall, men aged 15–49 years were as likely as women in the same age group to have had recent intercourse (Table 6.4.2). About 44 percent of men had sexual intercourse in the four weeks before the survey, 23 percent had sexual intercourse in the past year but not in the previous four weeks, about 8 percent had sex one or more years ago, and about 6 percent have never had sexual intercourse. Men’s sexual activity patterns were quite similar to those of women but at different levels. However, the percentage levels are similar, indicating very active and high sexual activity among Nauruans in the four weeks before the 2007 NDHS.

**Table 6.4.1: Recent sexual activity of women**

*Percent distribution of women aged 15–49 by timing of last sexual intercourse, according to background characteristics, Nauru 2007*

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of women
	Within the last 4 weeks	Within 1 year <sup>1</sup>	One or more years	Missing			
<b>Age</b>							
15–19	23.4	22.5	3.0	5.1	45.9	100.0	117
20–24	45.3	30.6	11.2	6.4	6.5	100.0	131
25–29	56.6	22.3	15.5	5.7	0.0	100.0	96
30–34	67.7	18.2	8.4	3.9	1.8	100.0	85
35–39	65.5	18.8	6.2	9.5	0.0	100.0	61
40–44	56.7	4.1	19.8	19.4	0.0	100.0	62
45–49	40.3	14.2	25.5	20.0	0.0	100.0	66
<b>Marital status</b>							
Never married	16.2	26.1	18.3	5.1	34.2	100.0	186
Married or living together	67.4	17.4	4.9	10.3	0.0	100.0	386
Divorced/separated/widowed	(21.7)	(23.4)	(44.1)	(10.8)	(0.0)	100.0	46
<b>Marital duration<sup>2</sup></b>							
0–4 years	66.5	23.1	1.8	8.6	0.0	100.0	92
5–9 years	72.1	18.1	3.8	6.0	0.0	100.0	85
10–14 years	65.8	19.7	5.8	8.7	0.0	100.0	53
15–19 years	(74.9)	(13.0)	(6.4)	(5.6)	(0.0)	100.0	54
20–24 years	(64.6)	(6.5)	(6.9)	(22.0)	(0.0)	100.0	37
25+ years	(54.9)	(19.2)	(6.1)	(19.9)	(0.0)	100.0	34
Married more than once	(64.2)	(13.8)	(8.9)	(13.1)	(0.0)	100.0	32

**Table 6.4.1 (continued)**

<b>Education</b>							
Less than secondary	*	*	*	*	*	100.0	13
Secondary	48.3	20.2	11.9	9.2	10.4	100.0	555
More than secondary	*	*	*	*	*	100.0	50
<b>Wealth quintile</b>							
Lowest	45.9	19.6	20.6	5.7	8.2	100.0	127
Second	47.3	17.4	13.0	8.5	13.8	100.0	126
Middle	45.5	20.2	10.1	10.8	13.3	100.0	129
Fourth	52.7	23.6	8.4	9.0	6.3	100.0	116
Highest	52.2	22.0	6.4	9.9	9.5	100.0	119
Total	48.6	20.5	11.8	8.8	10.3	100.0	618

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

<sup>1</sup> Excludes women who had sexual intercourse within the last four weeks.

<sup>2</sup> Excludes women who are not currently married.

**Table 6.4.2: Recent sexual activity of men**

*Percent distribution of men aged 15–49 by timing of last sexual intercourse, according to background characteristics, Nauru 2007*

<b>Background characteristic</b>	<b>Timing of last sexual intercourse</b>				<b>Never had sexual intercourse</b>	<b>Total</b>	<b>Number of men</b>
	<b>Within the last 4 weeks</b>	<b>Within 1 year<sup>1</sup></b>	<b>One or more years</b>	<b>Missing</b>			
<b>Age</b>							
15–19	30.2	20.5	7.6	8.9	32.7	100.0	60
20–24	44.2	34.6	8.9	11.0	1.2	100.0	57
25–29	46.9	22.7	6.9	23.5	0.0	100.0	56
30–34	(44.0)	(25.6)	(9.1)	(21.3)	(0.0)	100.0	48
35–39	(52.1)	(19.2)	(8.5)	(20.2)	(0.0)	100.0	39
40–44	(57.5)	(15.4)	(7.1)	(17.2)	(2.8)	100.0	27
45–49	(41.2)	(15.3)	(0.0)	(43.5)	(0.0)	100.0	23
<b>Marital status</b>							
Never married	25.7	30.9	15.2	10.6	17.6	100.0	119
Married or living together	55.3	19.0	1.8	23.9	0.0	100.0	183
Divorced/separated/widowed	*	*	*	*	*	100.0	9
<b>Wealth quintile</b>							
Lowest	(31.8)	(30.7)	(10.9)	(20.8)	(5.7)	100.0	45
Second	45.3	18.1	8.1	24.0	4.4	100.0	67
Middle	32.7	28.8	6.7	24.2	7.5	100.0	64
Fourth	50.7	15.2	6.8	14.9	12.4	100.0	64
Highest	54.2	25.7	5.9	10.4	3.8	100.0	72
Total 15–49	43.9	23.3	7.5	18.6	6.8	100.0	311
50+	(31.8)	(19.3)	(25.1)	(23.8)	(0.0)	100.0	43
Total men 15+	42.4	22.8	9.6	19.2	5.9	100.0	354

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

<sup>1</sup> Excludes men who had sexual intercourse within the last four weeks.

As in the case with women, men currently married or living with a woman were most likely to have had recent sexual intercourse: 55 percent compared with 26 percent of never married men. Like women, men in the higher wealth quintile households were more likely to have had sex in the past four weeks than those in lower wealth quintile households.

## 6.5 POSTPARTUM AMENORRHEA, ABSTINENCE AND INSUSCEPTIBILITY

Postpartum amenorrhea refers to the interval between childbirth and the return of menstruation. During this period, the risk of pregnancy is reduced. Among women not using contraception, the exposure to the risk of pregnancy in the period following birth is determined by two major factors: breastfeeding and sexual abstinence. Postpartum protection from conception can be prolonged by breastfeeding, which can lengthen the duration of amenorrhea, or by delayed resumption of sexual activities (postpartum abstinence). In Table 6.5, the percentage of births for which mothers were postpartum amenorrheic and abstaining is presented along with the percentage of births for which mothers were defined as still postpartum insusceptible (i.e. either amenorrhea or abstaining or both). These women were classified as not exposed (i.e. insusceptible) to the risk of pregnancy.

At the time of the survey, 29 percent of women who had given birth during the three years preceding the survey were insusceptible, because they were still amenorrheic (15 percent) or still abstaining (20 percent) or both. The median duration of postpartum insusceptibility was 5.2 months, 1.6 months for amenorrhea, and 2.1 months for postpartum sexual abstinence.

**Table 6.5: Postpartum amenorrhea, abstinence and insusceptibility**

*Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrheic, abstaining, and insusceptible, and median and mean durations, Nauru 2007*

Total and median duration (in months)	Percentage of births for which the mother is:			Number of births
	Amenorrheic	Abstaining	Insusceptible <sup>1</sup>	
Total	15.1	20.4	28.7	194
Median	1.6	2.1	5.2	na
Mean	5.8	7.5	10.2	na

Note: Estimates are based on status at the time of the survey.

na = not applicable

<sup>1</sup> Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth.

## 6.6 MEDIAN DURATION OF POSTPARTUM INSUSCEPTIBILITY BY BACKGROUND CHARACTERISTICS

The median duration of postpartum amenorrhea, abstinence and insusceptibility by various background characteristics is presented in Table 6.6. The median duration of postpartum abstinence shows very little variation across background characteristics, except for the lowest household wealth quintile. The information in Table 6.6 shows that the variation in postpartum insusceptibility is mainly due to variations in postpartum amenorrhea. There is no difference between women under age 30 and women over age 30 in the median duration of postpartum abstinence.

**Table 6.6: Median duration of amenorrhea, postpartum abstinence and postpartum insusceptibility**

*Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility following births in the three years preceding the survey, by background characteristics, Nauru 2007*

Background characteristic	Postpartum amenorrhea	Postpartum abstinence	Postpartum insusceptibility <sup>1</sup>
<b>Mother's age</b>			
15–29	2.2	2.1	5.5
30–49	0.5	2.1	3.6
<b>Wealth quintile</b>			
Lowest	4.6	4.1	6.8
Second	1.4	1.7	5.2
Middle	0.4	0.4	0.4
Fourth	0.9	2.0	3.6
Highest	2.1	2.1	2.1
Total	1.6	2.1	5.2

Note: Medians are based on the status at the time of the survey (current status).

<sup>1</sup> Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth.

## 6.7 MENOPAUSE

Another factor influencing the risk of pregnancy among women over age 30 is menopause. Table 6.7 presents an important indicator concerning fecundity as measured by evidence of menopause. The lack of a menstrual period among women who are neither pregnant nor postpartum amenorrheic in the six months preceding the 2007 NDHS, was taken as evidence of menopause and therefore infecundity. Although the onset of menopause was difficult to determine for an individual woman, methods were available for estimating the proportion of women who were menopausal for the population as a whole. For this analysis, a woman was considered menopausal if she was neither pregnant nor postpartum amenorrheic but did not have a menstrual period in the six months preceding the survey.

Table 6.7 summarises the percentage of women aged 30–49 that were menopausal. According to the 2007 NDHS, 17.8 percent of women aged 30–49 were menopausal. The proportion of women who were menopausal increased with age from about 5 percent for the 30–34 age group to approximately 38 percent for the 46–47 age group. It is clear that the onset of infertility with increasing age reduces the proportion of women who are exposed to the risk of pregnancy. Since these indicators are based on a very small sample of women, they should be interpreted with caution.

**Table 6.7: Menopause**

*Percentage of women aged 30–49 who are menopausal, by age, Nauru 2007*

	Percentage menopausal <sup>1</sup>	Number of women
30–34	5.0	85
35–39	7.7	61
40–41	(23.1)	30
42–43	*	23
44–45	*	22
46–47	(37.7)	26
48–49	*	27
Total	17.8	274

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases. Figures in parentheses are based on 25–49 unweighted cases.

<sup>1</sup> Percentage of all women who are not pregnant and not postpartum amenorrheic whose last menstrual period occurred six or more months prior to the survey.

## 6.8 KEY RESULTS

This section summarises the major findings on factors other than contraception that affect a woman's chances of becoming pregnant; factors that could be considered in policy and development planning in Nauru. These are referred to as other proximate (or direct) determinants of fertility and include marriage and sexual intercourse, postpartum amenorrhea and abstinence from sexual relations, and secondary infertility, menopause. These factors interact with and influence each other and affect fertility levels and trends. The results show that:

1. Marriage was more common among women than men in Nauru; about 53 percent of women were married as opposed to 49 percent of men. More women married earlier, with 46 percent in the 20–24 age group compared with only 30 percent of men in the same age group. The median age of marriage for women was 21 years compared with 23 years for men.
2. In contrast men initiated sex earlier than women. For instance, the median age at first sexual intercourse for men was reported to be 16.5 years compared with 17.4 years for women. Early initiation of sexual behaviour contributes to early exposure of STIs and early unwanted pregnancy.
3. Information on recent sexual activity is a useful measure of exposure to the risk of pregnancy. About one in every two women aged 15–49 were sexually active in the four weeks prior to the survey as compared with 44 percent of men.
4. About one in three women (28.7 percent) who had given birth during the three years preceding the survey were insusceptible, 15 percent were still amenorrheic, while 20 percent were still abstaining from sex.