

CHAPTER 7 FERTILITY PREFERENCES

Information on fertility preferences is of considerable importance to family planning programmes because it helps determine the need for contraception, whether for spacing or limiting births, and the extent of unwanted and mistimed pregnancies. Data on fertility preferences can also be useful as an indicator of the direction that future fertility may take.

In the 2007 NDHS, women who were either not pregnant or unsure about their status were asked: *'Would you like to have (a/another) child or would you prefer not to have any (more) children?'* A different question was posed for women who were pregnant at the time of the survey: *'After the child you are expecting, would you like to have another child or would you prefer not to have any more children?'* Women who indicated that they wanted another child were asked how long they would like to wait before the birth of the next child. Finally, women were asked how many children in total they would like to have, if they could start childbearing afresh.

Given the ongoing family planning programmes that address both men and women, and the fact that men play a vital role in the realisation of reproductive goals, the 2007 NDHS included questions that elicited information on men's fertility preferences. Responses to questions in the 2007 NDHS questionnaire provide a basis for the classification of women and men by their fertility preferences according to selected background characteristics.

7.1 DESIRE FOR MORE CHILDREN

Data on the desire for more children can provide an indication of future reproductive behaviour, provided that the required family planning services are available, affordable, and accessible to allow people to realise their fertility preferences. Table 7.1 presents the distribution of currently married women and men by their desire for more children according to the number of living children.

Table 7.1 shows the percent distribution of currently married women and currently married men aged 15–49 by their desire for children, according to the number of living children. Data show that about 22 percent of currently married women and 21 percent of currently married men desire no more children; 24 percent of currently married women and 15 percent of men desire to have another child soon, while 15 percent of currently married women and 16 percent of currently married men desire to have another child later after two or more years. Among all currently married women, 14 percent are sterilised compared with 7.6 percent of currently married men who are sterilised.

Table 7.1: Fertility preferences by number of living children

Percent distribution of currently married women and currently married men aged 15–49 by desire for children, according to number of living children, Nauru 2007

| Desire for children | Number of living children | | | | | | | Total 15–49 | 50+ | Total men 15+ |
|---------------------------------|---------------------------|-------|-------|-------|--------|--------|-------|----------------|-----|---------------------|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6+ | | | |
| WOMEN¹ | | | | | | | | | | |
| Have another soon ² | 59.1 | 29.5 | 22.7 | 20.3 | (9.9) | (1.9) | 7.7 | 23.7 | na | na |
| Have another later ³ | 5.0 | 22.2 | 22.1 | 30.0 | (16.9) | (5.4) | 3.4 | 15.0 | na | na |
| Have another, undecided when | 13.1 | 10.3 | 8.5 | 3.5 | (5.5) | (0.0) | 1.4 | 6.5 | na | na |
| Undecided | 5.0 | 15.1 | 14.3 | 12.9 | (15.5) | (7.9) | 9.6 | 11.3 | na | na |
| Want no more | 7.8 | 11.7 | 24.1 | 13.8 | (23.3) | (46.0) | 34.9 | 21.9 | na | na |
| Sterilised ⁴ | 2.3 | 0.0 | 5.7 | 16.2 | (13.2) | (31.4) | 31.3 | 13.5 | na | na |
| Declared infecund | 6.8 | 11.3 | 2.5 | 2.0 | (5.5) | (4.4) | 6.5 | 5.6 | na | na |
| Missing | 0.8 | 0.0 | 0.0 | 1.3 | (10.0) | (2.9) | 5.3 | 2.6 | na | na |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | na | na |
| Number | 68 | 53 | 62 | 58 | 43 | 43 | 58 | 386 | na | na |

Table 7.1 (continued)

| | MEN ⁵ | | | | | | | | | |
|---------------------------------|------------------|--------|-------|--------|--------|-------|-------|-------|--------|-------|
| Have another soon ² | (20.9) | (13.7) | * | (15.3) | (9.7) | * | * | 14.9 | (7.7) | 13.8 |
| Have another later ³ | (9.9) | (33.3) | * | (5.4) | (18.9) | * | * | 16.0 | (0.0) | 13.6 |
| Have another, undecided when | (48.0) | (29.7) | * | (22.9) | (9.6) | * | * | 24.0 | (24.2) | 24.0 |
| Undecided | (6.2) | (15.7) | * | (18.1) | (22.7) | * | * | 14.6 | (0.0) | 12.3 |
| Want no more | (5.2) | (7.6) | * | (27.1) | (30.7) | * | * | 21.2 | (41.5) | 24.3 |
| Sterilised ⁴ | (7.5) | (0.0) | * | (6.2) | (8.4) | * | * | 7.6 | (9.2) | 7.8 |
| Declared infecund | (2.4) | (0.0) | * | (0.0) | (0.0) | * | * | 0.9 | (15.4) | 3.1 |
| Missing | (0.0) | (0.0) | * | (4.9) | (0.0) | * | * | 0.8 | (2.1) | 1.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 38 | 26 | 24 | 29 | 24 | 21 | 20 | 183 | 33 | 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

¹ The number of living children includes current pregnancy for women.

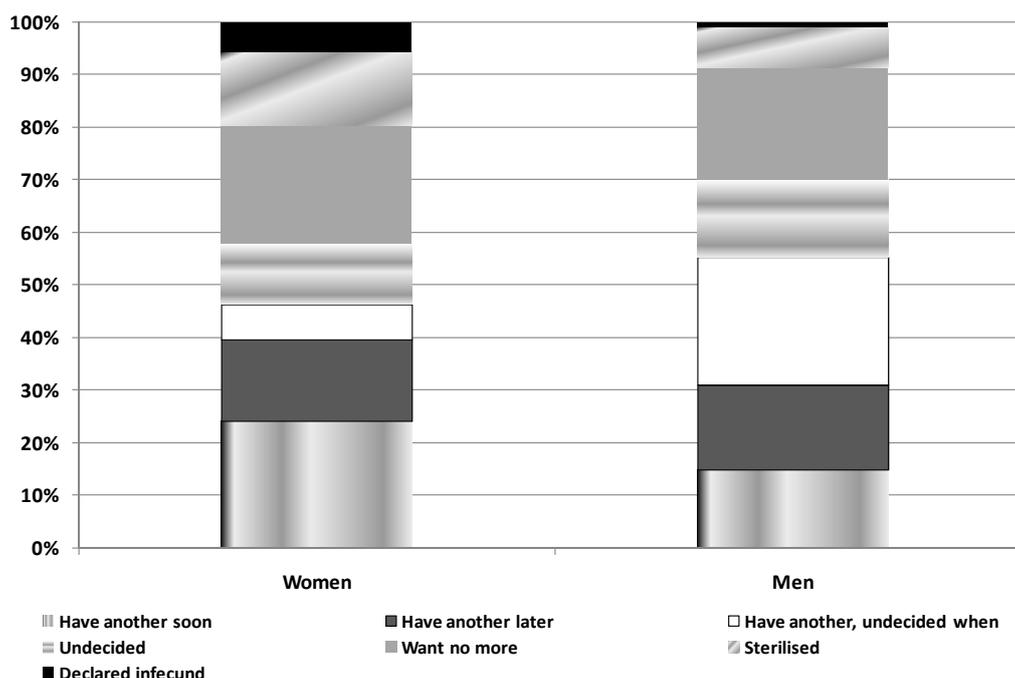
² Wants next birth within two years.

³ Wants to delay next birth for two or more years.

⁴ Includes both female and male sterilisation.

⁵ The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Figure 7.1: Proportion of women and men aged 15–49 by desire to have children



7.2 NEED FOR FAMILY PLANNING SERVICES

The proportion of women who want to stop childbearing or who want to space their next birth is a crude measure of the extent of family planning needs, given that not all of these women are exposed to the risk of pregnancy and some of them may already be using contraception. This section discusses the extent of need and the potential demand for family planning services. Women who want to postpone their next birth for two or more years, or who want to stop childbearing altogether but are not using a contraceptive method are said to have an unmet need for family planning. Pregnant women are considered to have an unmet need for birth spacing or

birth limiting if their pregnancy was mistimed or unwanted. Similarly, amenorrheic women are categorised as having an unmet need if their last birth was mistimed or unwanted. Women who are currently using a family planning method are said to have their need met for family planning services. The total demand for family planning services comprises those who fall in the met need and unmet need categories.

Table 7.2 presents data on unmet need, met need, and the total demand for family planning services for currently married women, as well as the totals for all women, and women who are not currently married. Overall, 24 percent of currently married women have an unmet need for family planning services. Of these women, 16 percent were for birth spacing and 7 percent were for birth limiting. About four out of ten married women (36 percent) were currently using contraceptive methods. This constitutes the overall met needs for family planning in Nauru. The total demand for family planning services on the other hand is estimated at 59 percent, while the demand satisfied accounts for 60 percent.

A substantial difference was noted in the level of unmet needs for family planning by age group. As shown, currently married women below the age of 35 are more likely not to meet their need for family planning as opposed to currently married women aged 35 and older. This is clearly demonstrated by the proportion of unmet needs that are higher in younger married women as opposed to older women. The table also shows that the proportion of unmet needs is higher for birth spacing, particularly in younger married women (aged 15–29). Birth limiting however does not show any clear pattern; the same level is observed throughout all age groups. This result clearly indicates that younger women are more likely to opt for birth spacing than for birth limiting, whereas older married women are more likely to opt for birth limiting than for birth spacing. In other words, the demand for birth spacing is more common in younger women.

The proportion of met needs is higher for birth spacing than for birth limiting in younger age groups. For birth spacing, the proportion of met needs decreases with increased age except in the 35–39 age group, whereas for birth limiting, the proportion of met needs increases with age with the exception of women in the 35–39 age group. This result clearly reveals that the demand for family planning services, especially in younger married women, is for birth spacing whereas older women use any form of contraceptive methods for the purpose of birth limiting.

Table 7.2: Need and demand for family planning among currently married women

Percentage of currently married women aged 15–49 with unmet need for family planning, percentage with met need for family planning, the total demand for family planning, and the percentage for the demand for contraception that is satisfied, by background characteristics, Nauru 2007

| Background characteristic | Unmet need for family planning ¹ | | | Met need for family planning (currently using) ² | | | Total demand for family planning | | | Percentage of demand satisfied | Number of women |
|---------------------------|---|--------------|--------|---|--------------|--------|----------------------------------|--------------|--------|--------------------------------|-----------------|
| | For spacing | For limiting | Total | For spacing | For limiting | Total | For spacing | For limiting | Total | | |
| Age | | | | | | | | | | | |
| 15–19 | * | * | * | * | * | * | * | * | * | * | 21 |
| 20–24 | 30.3 | 6.4 | 36.6 | 22.8 | 4.3 | 27.0 | 53.0 | 10.7 | 63.7 | 42.5 | 76 |
| 25–29 | 21.5 | 9.6 | 31.1 | 21.8 | 11.3 | 33.1 | 43.3 | 20.9 | 64.3 | 51.6 | 69 |
| 30–34 | 14.9 | 8.7 | 23.7 | 10.3 | 29.5 | 39.8 | 25.2 | 38.2 | 63.5 | 62.7 | 71 |
| 35–39 | 10.0 | 7.6 | 17.5 | 15.8 | 22.7 | 38.6 | 25.8 | 30.3 | 56.1 | 68.7 | 54 |
| 40–44 | (5.0) | (5.4) | (10.3) | (12.7) | (38.4) | (51.0) | (17.7) | (43.7) | (61.4) | (83.1) | 47 |
| 45–49 | (3.8) | (4.6) | (8.4) | (0.0) | (35.7) | (35.7) | (3.8) | (40.3) | (44.1) | (80.9) | 48 |
| Education | | | | | | | | | | | |
| Less than secondary | * | * | * | * | * | * | * | * | * | * | 7 |
| Secondary | 16.6 | 6.9 | 23.5 | 15.6 | 21.2 | 36.8 | 32.2 | 28.1 | 60.3 | 61.0 | 353 |
| More than secondary | (9.2) | (6.2) | (15.4) | (8.1) | (16.2) | (24.3) | (17.2) | (22.4) | (39.7) | (61.3) | 26 |

Table 7.2 (continued)

| Wealth quintile | | | | | | | | | | | |
|-----------------|------|------|------|------|------|------|------|------|------|------|-----|
| Lowest | 6.8 | 10.4 | 17.2 | 16.3 | 14.5 | 30.8 | 23.1 | 25.0 | 48.1 | 64.1 | 62 |
| Second | 14.0 | 6.8 | 20.8 | 16.9 | 22.3 | 39.2 | 30.8 | 29.2 | 60.0 | 65.3 | 81 |
| Middle | 23.5 | 7.6 | 31.1 | 9.8 | 21.1 | 30.9 | 33.2 | 28.7 | 61.9 | 49.9 | 82 |
| Fourth | 12.3 | 6.9 | 19.3 | 20.4 | 19.0 | 39.4 | 32.7 | 25.9 | 58.6 | 67.2 | 82 |
| Highest | 23.4 | 4.2 | 27.6 | 12.1 | 24.5 | 36.7 | 35.5 | 28.7 | 64.2 | 57.1 | 79 |
| Total | 16.4 | 7.1 | 23.5 | 15.1 | 20.6 | 35.6 | 31.4 | 27.6 | 59.1 | 60.3 | 386 |

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.

¹ Unmet need for spacing includes pregnant women whose pregnancy was mistimed; amenorrheic women who are not using family planning and whose last birth was mistimed, or whose last birth was unwanted but now say they want more children; and fecund women who are neither pregnant nor amenorrheic, who are not using any method of family planning, and say they want to wait two or more years for their next birth. Also included in unmet need for spacing are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth. Unmet need for limiting refers to pregnant women whose pregnancy was unwanted; amenorrheic women who are not using family planning, whose last child was unwanted and who do not want any more children; and fecund women who are neither pregnant nor amenorrheic, who are not using any method of family planning, and who want no more children

² 'Using' for spacing is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. Using for limiting is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account here

Data on education are too small for comparison, so caution is advised when interpreting the results.

Table 7.2 also shows that the proportion of unmet needs for family planning is higher in the middle and higher wealth quintiles. Additionally, the proportion of unmet needs is highest for birth spacing than for birth limiting, except in the lowest wealth quintile. The proportion of met needs for family planning is highest in the second and fourth wealth quintiles. Surprisingly, there is a very low proportion of met needs for birth spacing (10 percent) compared with met needs for birth limiting (21 percent) in the middle wealth quintile.

7.3 IDEAL NUMBER OF CHILDREN

This section focuses on the respondent's ideal number of children, implicitly taking into account the number of children that the respondent already has. Women and men, regardless of marital status, were asked about the number of children they would choose to have if they could start afresh. Respondents who had no children were asked, '*If you could choose exactly the number of children to have in your whole life, how many would that be?*' For respondents who had children, the question was rephrased as follows: '*If you could go back to the time when you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?*' Responses for women and men aged 15–49 are summarised in Table 7.3.

Generally, the average ideal number of children expressed by currently married men and women aged 15–49 were 3.6 and 4.6, respectively. The mean ideal number increased with the number of living children. The average ideal number of children for all men and women was 3.1 and 4.1, respectively. As also shown, 22 percent of currently married women preferred 2 as an ideal number of children. Equally so, about 20 percent of currently married men expressed 2 as an ideal number of children.

Table 7.3: Ideal number of children

Percent distribution of women and men aged 15–49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to number of living children, Nauru 2007

| Ideal number of children | Number of living children | | | | | | | Total |
|--|---------------------------|--------|--------|--------|--------|--------|-------|-------|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6+ | |
| WOMEN¹ | | | | | | | | |
| 0 | 8.2 | 7.1 | 9.0 | 10.7 | 10.0 | (2.0) | 7.0 | 7.9 |
| 1 | 14.5 | 15.8 | 2.7 | 7.8 | 0.0 | (4.1) | 3.3 | 9.3 |
| 2 | 35.9 | 22.8 | 20.0 | 3.3 | 6.1 | (25.0) | 5.5 | 22.3 |
| 3 | 10.2 | 10.5 | 15.4 | 15.9 | 0.0 | (3.3) | 2.4 | 9.2 |
| 4 | 10.5 | 10.3 | 14.8 | 20.5 | 28.4 | (4.0) | 2.8 | 12.2 |
| 5 | 8.6 | 7.8 | 11.2 | 12.1 | 11.0 | (27.0) | 5.8 | 10.5 |
| 6+ | 6.0 | 15.1 | 16.3 | 25.0 | 41.1 | (24.5) | 55.0 | 20.0 |
| Non-numeric responses | 6.1 | 10.5 | 10.5 | 4.8 | 3.4 | (10.0) | 18.2 | 8.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 229 | 86 | 74 | 61 | 52 | 50 | 66 | 618 |
| Mean ideal number children for:² | | | | | | | | |
| All | 2.7 | 3.8 | 4.2 | 4.3 | 5.7 | 4.7 | 7.8 | 4.1 |
| Number | 215 | 77 | 66 | 58 | 51 | 45 | 54 | 566 |
| Currently married | 2.8 | (3.5) | 4.3 | 4.2 | (6.1) | (4.4) | (7.8) | 4.6 |
| Number | 63 | 47 | 58 | 55 | 42 | 40 | 47 | 351 |
| MEN³ | | | | | | | | |
| 0 | 13.4 | (8.3) | (8.8) | (12.7) | (16.0) | * | * | 14.5 |
| 1 | 12.2 | (0.0) | (0.0) | (0.0) | (11.8) | * | * | 7.2 |
| 2 | 25.5 | (38.3) | (11.8) | (15.8) | (7.8) | * | * | 19.9 |
| 3 | 13.2 | (13.9) | (20.9) | (5.2) | (0.0) | * | * | 10.8 |
| 4 | 6.7 | (9.1) | (7.2) | (10.1) | (18.8) | * | * | 7.9 |
| 5 | 6.2 | (0.0) | (7.9) | (20.8) | (3.0) | * | * | 8.1 |
| 6+ | 1.8 | (5.5) | (6.2) | (18.5) | (26.6) | * | * | 8.7 |
| Non-numeric responses | 21.0 | (24.8) | (37.2) | (16.8) | (16.0) | * | * | 22.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 160 | 31 | 25 | 30 | 24 | 21 | 21 | 311 |
| Mean ideal number children for:² | | | | | | | | |
| All | 2.2 | (2.5) | * | * | * | * | * | 3.0 |
| Number | 126 | 23 | 16 | 25 | 20 | 16 | 14 | 240 |
| Currently married | (1.9) | * | * | * | * | * | * | 3.5 |
| Number | 30 | 19 | 15 | 24 | 20 | 16 | 14 | 138 |
| Mean ideal number children for men 15+:² | | | | | | | | |
| All | 2.2 | (2.5) | * | (4.4) | (4.4) | * | * | 3.1 |
| Number | 133 | 24 | 20 | 30 | 22 | 19 | 19 | 272 |
| Currently married | (2.1) | (2.7) | * | (4.5) | (4.4) | * | * | 3.6 |
| Number | 36 | 20 | 20 | 29 | 22 | 19 | 19 | 164 |

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.

¹ The number of living children includes current pregnancy for women.

² Means are calculated excluding respondents who gave non-numeric responses.

³ The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

7.4 MEAN IDEAL NUMBER OF CHILDREN BY BACKGROUND CHARACTERISTICS

The mean ideal number of children among women aged 15–49 by background characteristics is presented in Table 7.4. As shown, the average ideal number of children increased steadily with women’s age such that the mean ideal number of children expressed by married women aged 15–19 was 2.6 and 6.3 for women aged 45–49. Data show some difference in the mean ideal number of children expressed by wealth quintile. The lowest mean ideal number of children is 3.5 for women in the middle and fourth wealth quintiles, while the highest mean ideal number of children of 4.8 is for women in the second wealth quintile.

Table 7.4: Mean ideal number of children

Mean ideal number of children for all women aged 15–49 by background characteristics, Nauru 2007

| Background characteristic | Mean | Number of women ¹ |
|---------------------------|------|------------------------------|
| Age | | |
| 15–19 | 2.6 | 108 |
| 20–24 | 3.9 | 124 |
| 25–29 | 3.7 | 90 |
| 30–34 | 4.1 | 78 |
| 35–39 | 4.7 | 57 |
| 40–44 | 5.4 | 51 |
| 45–49 | 6.3 | 59 |
| Wealth quintile | | |
| Lowest | 4.5 | 112 |
| Second | 4.8 | 114 |
| Middle | 3.5 | 115 |
| Fourth | 3.5 | 110 |
| Highest | 4.2 | 114 |
| Total | 4.1 | 566 |

¹ Number of women who gave a numeric response.

7.5 FERTILITY PLANNING STATUS

The issue of unplanned and unwanted fertility was further investigated in the 2007 NDHS by asking women who had given birth in the five years before the survey whether the births were wanted at the time (planned), wanted but at a later time (mistimed), or not wanted at all (unwanted). For women who were pregnant at the time of the interview, this question was also asked with reference to the current pregnancy. The procedure required respondents to recall accurately their wishes at one or more points in the last five years. Care must be exercised in interpreting the results because an unwanted conception may have become a cherished child, leading to the rationalisation of responses to these questions.

According to Table 7.5, about 43 percent of births in the five years preceding the survey were wanted at the time, 31 percent were wanted later (mistimed), and 25 percent were not wanted at the time they were conceived. This finding clearly indicates that there is a great demand for birth spacing and limiting that is roughly consistent with the number of unmet needs for birth spacing and limiting observed in Table 7.3.1 above.

Looking at fertility planning status by birth order and age of the mother at birth, data show that little variation was noted in the proportion of births that were wanted by birth order and age of mother at births. However, the proportion of wanted births is highest in birth order 2 followed by birth orders higher than 4. As also shown, the proportion of mistimed births was highest in birth

order 3 followed by birth order 1, and lowest in birth order 2. About 29 percent of all four or more births were not wanted.

Table 7.5 also indicates a higher proportion of births (41 percent) for young mothers aged less than 20 were mistimed. Wanted births mostly occur among women in the 20–29 age group. Women’s tendency to want no more babies increases with age. Results of the 2007 NDHS show that 15 percent of young women (less than 20 years) do not want more children compared with 28 percent of older women (age group 30–34) who do not want more children. Again, this result reveals the need for birth spacing and even more so for birth limiting for older women.

Table 7.5 Fertility planning status

Percent distribution of births to women aged 15–49 in the five years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother’s age at birth, Nauru 2007

| Birth order and mother’s age at birth | Planning status of birth | | | | Total | Number of births |
|---------------------------------------|--------------------------|--------------|----------------|---------|-------|------------------|
| | Wanted then | Wanted later | Wanted no more | Missing | | |
| Birth order | | | | | | |
| 1 | 41.2 | 37.2 | 20.8 | 0.8 | 100.0 | 95 |
| 2 | 51.0 | 23.3 | 23.0 | 2.7 | 100.0 | 87 |
| 3 | 35.1 | 38.7 | 26.2 | 0.0 | 100.0 | 61 |
| 4+ | 42.1 | 29.1 | 28.8 | 0.0 | 100.0 | 128 |
| Mother’s age at birth | | | | | | |
| <20 | 39.7 | 41.3 | 15.2 | 3.8 | 100.0 | 62 |
| 20–24 | 45.4 | 26.7 | 27.3 | 0.6 | 100.0 | 136 |
| 25–29 | 45.2 | 31.7 | 23.1 | 0.0 | 100.0 | 94 |
| 30–34 | 41.3 | 30.7 | 28.0 | 0.0 | 100.0 | 48 |
| 35–39 | * | * | * | * | 100.0 | 22 |
| 40–44 | * | * | * | * | 100.0 | 9 |
| Total | 42.8 | 31.4 | 25.0 | 0.8 | 100.0 | 371 |

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

7.6 WANTED FERTILITY RATES

Using information on whether births occurring in the five years prior to the survey were wanted or not, a total ‘wanted’ fertility rate was calculated. The wanted fertility rate measures the potential demographic impact of avoiding unwanted births. The wanted fertility rate is calculated in the same way as the conventional total fertility rate, except that unwanted births are excluded. A birth is considered wanted if the number of living children at the time of conception was less than the ideal number of children reported by the respondent. The gap between wanted and actual fertility shows how successful women are in achieving their reproductive intentions.

A comparison of the total wanted fertility rates and total fertility rates for the three years preceding the survey is presented in Table 7.7. Data reveal that if all unwanted births are eliminated, the total fertility rate in Nauru would be 2.8 children per woman instead of the actual total fertility rate of 3.4 children per woman. The overall gap between actual and wanted fertility ranges is 1.4.

Table 7.6 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, Nauru 2007

| Background characteristic | Total wanted fertility rates | Total fertility rate |
|---------------------------|------------------------------|----------------------|
| Total | 2.8 | 3.4 |

Note: Rates are calculated based on births to women aged 15–49 in the period 1–36 months preceding the survey. The total fertility rates are the same as those presented in Table 4.2.

7.7 KEY RESULTS

Unmet needs for contraception can lead to unintended pregnancies, which pose risks for both mother and child and contribute to high fertility levels. This section discusses major findings on the level and size of unmet needs of contraception according to the 2007 NDHS. Understanding the level or size of unmet needs of contraception and the background of women with unmet needs of family planning methods can help strengthen health services and family planning programmes in targeting subgroups that are in need of such services. Woman’s fertility preferences and desire for having children are likely to be achieved provided that the required family planning services are available, affordable and accessible.

The results show that 23.5 percent of currently married women have an unmet need for family planning services; 16.4 percent have an unmet need for birth spacing, and 7.1 percent for birth limiting. The size of unmet needs of contraception indicates that many currently married women are having difficulties gaining full access to family planning methods. The needs of currently married women for both birth spacing and birth limiting are not met, which can lead to unwanted and unplanned births.

The 2007 NDHS also examined women’s fertility preferences, their desire to limit childbearing, ideal number of children, fertility planning and wanted fertility rates. These are indications of contraception needs, particularly to enable women to have their desired number of children. Results can assist and provide overall direction of family planning programmes and services in targeting subgroups that are in need of such services. The following are the results.

1. About 22 percent of currently married women and men do not want any more children. Results indicate the desire to have two children for currently married women and men, although the desire is not met.
2. Results show that the mean ideal number of children for currently married women is 4.6, whereas it is 3.6 for currently married men.
3. About 32 percent of births were mistimed and most young mothers (less than 20 years of age) are having mistimed births. About 25 percent of births are not being planned by women aged 15–49.
4. Data show that the desired total fertility rate is 2.8 per woman as compared with the actual total fertility rate of 3.4 for the three years preceding the survey. This implies that if all unwanted births are eliminated, the actual fertility rate for Nauru would have been 2.8 children per woman.

CHAPTER 8 INFANT AND CHILD MORTALITY

This chapter presents estimates of levels, trends, and differentials of neonatal, postneonatal, infant and childhood mortality, as well as perinatal mortality in Nauru. The information presented in this chapter is important not only for the demographic assessment of the country's population, but also in the design and evaluation of health policies and programmes. Primary and preventative health services focus on improving the quality of life of Nauruan people, which includes the reduction of infant and childhood mortality and the incidence of high-risk pregnancies. They also serve the needs of the health ministry by identifying a category of the population, particularly babies and their mothers, who are at high risk of mortality.

8.1 DEFINITIONS, METHODOLOGY AND ASSESSMENT OF DATA QUALITY

Childhood mortality measures (or indicators) presented in this chapter are defined as follows:

Neonatal mortality: the probability of dying within the first month of life

Infant mortality: the probability of dying between birth and the first birthday

Postneonatal mortality: the arithmetic difference between infant and neonatal mortality

Child mortality: the probability of dying between exact age one and the fifth birthday

Under-5 mortality: the probability of dying between birth and the fifth birthday.

The data used in estimating these mortality rates were collected in the birth history section of the 2007 NDHS women's questionnaire. The section begins with questions about the respondent's childbearing experience (i.e. the number of sons and daughters who live in the household, those who live elsewhere, and those who have died). Next, for each live birth, information on the name, date of birth, sex, whether the birth was single or multiple, and survivorship status was recorded. For living children, information about their age and whether they resided with their mother was obtained. For children who had died, the respondent was asked to provide the child's age at death.

A retrospective birth history, such as that included in the 2007 NDHS is susceptible to several data collection errors. First, only surviving women aged 15–49 were interviewed; therefore, no data are available for children of women who had died. The resulting mortality estimates will be biased if the child mortality rate of surviving and non-surviving women differs substantially. Another possible error in data collection is under-reporting of events (births and deaths), especially in cases where deaths occur early in infancy. If such deaths are selectively omitted, the consequence will not only be a lower infant mortality rate and neonatal mortality rate, but also a low ratio of neonatal deaths to infant deaths and early neonatal death (within one week) to neonatal deaths. It is believed that under-reporting of early infant deaths may increase with the length of time since the child's death (e.g. an early infant death that occurred ten years before the survey may be more likely to be omitted than an early infant death two years before the survey). Thus, an examination of these patterns over time is critical.

8.1.1 Reporting of children's birth dates

Mis-stating the date of birth and the age at death of a child results in a distortion of the age pattern of death among children. This may affect the final indices obtained because of shifting ages above or below the borderline ages. Many DHS reports worldwide have reported evidence of age shifting or heaping to years outside of the required cut-off year to avoid administering lengthy birth-history related questions. In the case of the 2007 NDHS, evidence from Appendix Table C.4 shows that there was no serious shift in the reporting of births during the operations. This is not to say that this was not the case however, probably there were cases where interviewers shifted dates but not enough to show heaping in Table C.4. The table also shows that the date of birth of more than 9 out of 10 babies born were recorded in the 2007 NDHS.

8.1.2 Reporting of children's age at death

Another aspect that affects childhood mortality estimates is the accurate reporting of age at death. In general, these problems are less serious for periods in the recent past than for those in the more distant past. If the ages are misreported, it will bias the estimates, especially if the net effect of the age misreporting results in the transference of deaths from one age bracket to another. For example, a net transfer of deaths from under age 1 to age 1 year and older will decrease the estimate of infant mortality and increase the estimate of childhood mortality. To minimise errors in the reporting of age at death, the 2007 NDHS interviewers were instructed to record the age at death in days if the death took place within one month after birth, in months if the child died within 24 months, and in years if the child was two years or older.

The distribution of child deaths by age of the child at death is shown in Appendix Table C.5. The table shows that age heaping at ages 9 days, 14 days and 21 days — which are usually observed in other DHSs — are not a concern in the 2007 NDHS results. Although age heaping at 14 days and 21 days may not bias any indicator, the heaping at 9 days usually leads to lower estimates of early neonatal mortality and perinatal mortality, but because this is not the case in Nauru, the results can be used as indicators for policy and/or planning purposes. However, it caution must be exercised in using the mortality measures as indicators of levels of early age mortality because of the very low number of cases.

Appendix Table C.6 presents the distribution of death under age 2 years by age at death in months over a 20-year period split into five-year groups. Neonatal deaths in the past 20 years constituted 71 percent of all infant deaths, which is considered to be quite high.

8.1.3. Sampling errors for child and infant mortality estimates

As discussed in Appendix B of this report, all estimates produced from the NDHS are affected by two types of errors: non-sampling and sampling. While this issue is addressed in detail in this appendix, it is worthwhile making a special mention of the sampling error associated with estimates of child and infant mortality in this chapter, due to their significant impact. Unfortunately, for any sample survey, when collecting information for a variable where the number of cases is quite minimal (the situation with child and infant mortality), sampling errors can become significantly large, and as such, great care should be used when using this information.

A brief description of the key estimates produced in this chapter, along with information to assist in determining their reliability is provided in the table below:

Table 8.1.3a: Five-year mortality rates for Nauru (refers to zero to four years before the NDHS, around 2003–2007)

| Indicator | Estimate /1,000 births | Std error | 95% CI | | RSE (%) |
|------------------------|---------------------------|-----------|--------|-------|---------|
| | | | Lower | Upper | |
| Neonatal mortality | 26.8 | 8.0 | 10.9 | 42.8 | 29.7 |
| Postneonatal mortality | 11.1 | 6.7 | 0.0 | 24.4 | 60.2 |
| Infant mortality | 37.9 | 9.6 | 18.7 | 57.2 | 25.4 |
| Child mortality | 0.0 | 0.0 | 0.0 | 0.0 | 0 |
| Under-5 mortality | 37.9 | 9.6 | 18.7 | 57.2 | 25.4 |

Table 8.1.3b: Ten-year mortality rates for Nauru (refers to zero to nine years before the NDHS, about 1998–2007)

| Indicator | Estimate /1,000 births | Std error | 95% CI | | RSE (%) |
|------------------------|---------------------------|-----------|--------|-------|---------|
| | | | Lower | Upper | |
| Neonatal mortality | 26.8 | 7.8 | 11.2 | 42.4 | 29.1 |
| Postneonatal mortality | 12.3 | 4.2 | 4.0 | 20.6 | 33.8 |
| Infant mortality | 39.1 | 9.4 | 20.3 | 57.9 | 24.1 |
| Child mortality | 1.6 | 1.6 | 0.0 | 4.9 | 2.1 |
| Under-5 mortality | 40.7 | 9.5 | 21.6 | 59.7 | 23.4 |

To help understand the reliability of estimates in the second column, the standard error (std error), 95 percent confidence interval (95 percent CI) or relative standard error (RSE) can be used, although the last two options generally provide the quickest interpretation of an estimate's accuracy. To understand these, a brief description is provided below.

95% CI: For any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design (the larger this range, the less reliable the estimate).

RSE (%): This is the standard error expressed as a percentage of the estimate (the larger this value, the less reliable the estimate).

Generally speaking, estimates with RSEs above 10 percent are considered usable, but should be used with care, while estimates with RSEs above 25 percent, should not be considered reliable. Given that nearly all the estimates shown above have RSEs falling between 15 percent and 30 percent, it strongly suggests that estimates provided in this chapter should be used with great care.

8.2 EARLY CHILDHOOD MORTALITY RATES: LEVELS AND TRENDS

The 2007 Nauru DHS collected birth histories from 588 women. The early childhood mortality rates for the 15-year period preceding the survey are presented below by five-year periods in Table 8.2.

Table 8.2: Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates in five-year periods preceding the survey, Nauru 2007

| Years preceding the survey | Neonatal mortality (NN) | Postneonatal mortality (PNN) ¹ | Infant mortality (1q0) | Child mortality (4q1) | Under-5 mortality (5q0) |
|----------------------------|-------------------------|---|------------------------|-----------------------|-------------------------|
| 0–4 (2003–2007) | 27 | 11 | 38 | 0 | 38 |
| 5–9 (1998–2003) | 27 | 14 | 40 | 3 | 44 |
| 10–14 (1993–1998) | 8 | 3 | 12 | 3 | 15 |

¹ Computed as the difference between the infant and neonatal mortality rates.

For the most recent period (i.e. zero to four years before the survey, reflecting roughly 2003–2007), the infant mortality rate was 38 deaths per 1,000 live births. This means that about 4 in every 100 babies born in Nauru do not live to their first birthday. Those surviving to their first birthday will also survive until reaching their fifth birthday. The overall under-5 mortality is therefore 38 deaths per 1,000 live births (same as the infant mortality rate), which implies that four in every one hundred Nauruan babies do not survive to their fifth birthday.

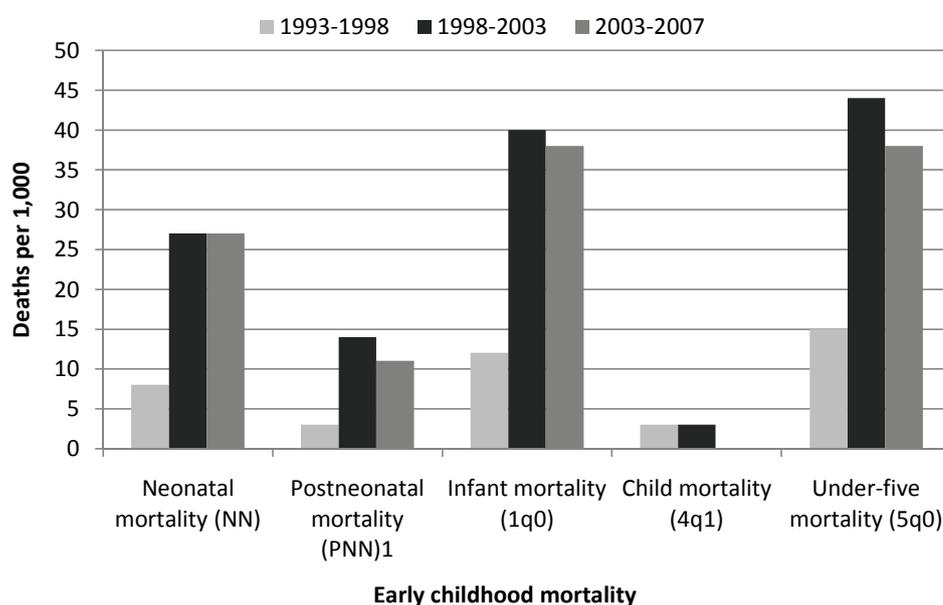
The first month of life is associated with the highest risk to survival. The neonatal mortality rate is 27 deaths per 1,000 live births, implying that nearly 3 out of every 100 infant deaths occur during the first month of life. As childhood mortality declines, postneonatal mortality usually declines faster than the neonatal mortality because neonatal mortality is frequently caused by biological factors that are not easily addressed by primary care interventions. In Nauru, postneonatal mortality is 11 per 1,000 births among infants during the five-year period before the survey.

According to the 2007 NDHS, mortality estimates in Table 8.2 for the period 1998–2003 increased from low levels observed for the period 1993–1998. For example, a high level increase is observed in neonatal deaths between 1993 and 1998 and between 1998 and 2003, from 8 deaths per 1,000 live births to 27 per 1,000, and an increase in postneonatal deaths from 3 during the period 1993–1998 to 14 during the period 1998–2003. The infant mortality rate increased from 12 to 40 during the same period.

Data from the 2007 NDHS show that the situation of childhood mortality in Nauru perhaps improved in the period 2003–2007, compared with the earlier period 1998–2003. This improved situation is observed in postneonatal, infant, childhood and under-5 mortality. For example, the infant mortality rate decreased from 40 per 1,000 live births during the period 1998–2003 to

38 infant deaths per 1,000, while the rate for under-5 mortality decreased from 44 to 38 deaths per 1,000 births (See Fig. 8.1)

Figure 8.1: Mortality trends



8.3 HIGH-RISK FERTILITY BEHAVIOUR

The 2007 NDHS examined the relative importance of maternal fertility patterns associated with increased risk of mortality. Generally, infants and children have a greater probability of dying if they are born to mothers who are too old or too young, or if they are born after a short birth interval, or if they are of high birth order. In the analysis of the effects of high-risk fertility behaviour on child survival, a mother is classified as too young if she is less than age 18, and too old if she is over age 34 at the time of birth. A short birth interval is defined as a birth occurring less than 24 months after the previous birth, and a child is of high birth order if the mother has previously given birth to three or more children (i.e. if the child is of birth order four or higher).

Table 8.3 shows the percent distribution of births in the five-year period before the survey according to these elevated risk factors. The table also examines the relative risk of dying for children by comparing the proportion dead in each specified high-risk category with the proportion dead among children not in any high-risk category. Although first births are commonly associated with increased risk of mortality, they are not included in any high-risk category because they are considered an unavoidable risk.

Only 22 percent of births in Nauru were not in any high-risk category. An additional 20 percent of births are first order births to mothers aged 18–34, which is considered an unavoidable risk category. The remaining 58.7 percent of births in Nauru are in at least one of the specified avoidable high-risk categories. Over 40 percent of births are in only one of the high-risk categories (mostly birth orders > 3 is 19 percent and 17 percent for short birth intervals of < 24 months), while 16 percent are in multiple high-risk categories. Births in multiple high-risk categories are mostly found in two combinations: 1) Birth intervals less than 24 months and birth orders higher than 3; and 2) age higher than 34 years and birth orders higher than 3.

The second column of Table 8.3 shows that the risk of dying for a child who falls in any avoidable high-risk category is 0.55 times that of a child not in any high-risk category, which means that the risk of dying is lower in the avoidable high-risk categories compared to births in the ‘not in any high risk category’.

This outcome is certainly unexpected, and is due to the very low number of cases.

However, a child's risk of dying is considerably higher if the mother's age is less than 18 years, thus showing a risk ratio that is more than twice as high (2.47) than that of births not in any other high-risk category.

Table 8.3 also shows the potential for high-risk births among currently married women. A woman's current age, time elapsed since the last birth, and parity are used to determine the risk categories in which any birth she conceived at the time of the survey would fall. In the final data processing, the criteria for placing women into specific risk categories are adjusted to take into account gestation period.

One-quarter (25 percent) of currently married women in Nauru are not in any high-risk category, while over half (61 percent) have the potential of giving birth to a child exposed to a higher risk of mortality, with 28 percent of married women falling into multiple high-risk categories.

Table 8.3: High-risk fertility behaviour

Percent distribution of children born in the five years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Nauru 2007

| Risk category | Births in the 5 years preceding the survey | | Percentage of currently married women ¹ |
|--|--|------------|--|
| | Percentage of births | Risk ratio | |
| Not in any high risk category | 21.7 | 1.00 | 25.0 |
| Unavoidable risk category | | | |
| First order births between ages 18 and 34 years | 19.7 | 0.51 | 14.4 |
| Single high-risk category | | | |
| Mothers's age <18 | 4.9 | 2.47 | 0.4 |
| Mothers's age >34 | 1.4 | 0.00 | 10.9 |
| Birth interval <24 months | 17.5 | 0.62 | 8.4 |
| Birth order >3 | 18.8 | 0.21 | 13.1 |
| Subtotal | 42.6 | 0.63 | 32.8 |
| Multiple high-risk category | | | |
| Age <18 & birth interval <24 months ² | 0.2 | 0.00 | 0.5 |
| Age >34 & birth interval <24 months | 0.2 | 0.00 | 0.7 |
| Age >34 & birth order >3 | 5.5 | 0.00 | 17.8 |
| Age >34 & birth interval <24 months & birth order >3 | 1.7 | 0.00 | 2.3 |
| Birth interval <24 months & birth order > ³ | 8.3 | 0.61 | 6.5 |
| Subtotal | 16.0 | 0.32 | 27.8 |
| In any avoidable high-risk category | 58.7 | 0.55 | 60.6 |
| Total | 100.0 | na | 100.0 |
| Number of births/women | 322 | na | 386 |

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category.

na = not applicable

¹ Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.

² Includes the category age <18 and birth order >3.

a Includes sterilised women.

8.4 KEY RESULTS

The following are key issues identified from the discussion in this chapter.

1. Data from the 2007 NDHS show a decline of infant mortality from 40 deaths per 1,000 births in the period 1998–2003 to 38 deaths per 1,000 births in the period 2003–2007. However, this mortality level and trend is not supported by data from the vital registration system, indicating a considerably higher level of early age mortality. It should be mentioned that levels and trends of early age mortality from the 2007 NDHS are based on very low numbers of respondents.
2. The 2007 NDHS examined the relative importance of maternal fertility patterns associated with increased risk of mortality. Generally, infants and children have a greater probability of dying if they are born to mothers who are too old or too young, if they are born after a short birth interval, or if they are of high birth order. In the analysis of the effects of high-risk fertility behaviour on child survival, a mother is classified as too young if she is less than age 18, and too old if she is over age 34 at the time of birth. A short birth interval is defined as a birth occurring less than 24 months after the previous birth, and a child is of high birth order if the mother had previously given birth to 3 or more children (i.e. if the child is of birth order 4 or higher). The results show that:
 - only 22 percent of births in Nauru were not in any high-risk category;
 - an additional 20 percent of births are first order births to mothers aged 18–34 years, considered an unavoidable risk category;
 - the remaining 58 percent of births in Nauru are in at least one of the specified avoidable high-risk categories:
 - Over 40 percent are in only one of the high-risk categories (mostly high birth order > 3 is 19 percent and 17 percent for short birth intervals of < 24 months), while 16 percent are in multiple high-risk categories;
 - The births in multiple high-risk categories are mostly found in two combinations: 1) Birth interval less than 24 months and birth order higher than 3; and 2) age higher than 34 years and birth order higher than 3.

However, the NDHS data show that the risk of dying is lower in the avoidable high-risk categories compared with births in the ‘not in any high risk category’. Again, this unexpected outcome is due to the very low number of cases.

CHAPTER 9 REPRODUCTIVE HEALTH

Reproductive health and family planning has been recognised as one of Nauru's priorities as detailed in the Nauru National Sustainable Development Strategy (NSDS), Public Health Operational Plan 2008 and Nauru's commitment to the MDGs.

Nauru's NSDS expresses commitment to a healthy population. The 2005–2025 Nauru NSDS, under its outputs and milestones for the MDGs (Nauru is a signatory to the Millennium Declaration), recognises the importance of contraception as a means of improving maternal health. The Public Health Operational Plan 2008, states the following outputs and milestones for strengthening and ensuring implementation and sustainability of reproductive health:

- Operate regular antenatal, postnatal and family planning clinics
- Operate regular baby clinic and immunisation programmes
- Operate STI, HIV and AIDS awareness programmes and screening and surveillance campaigns.

The MDGs that relate to reproductive health are:

- **Reduce child mortality:** Reduced by two-thirds, between 1990 and 2015, the under 5 mortality rate ;
- **Improve maternal health:** Reduced by three-quarters, between 1990 and 2015, the under 5 mortality ratio;
- **Combat HIV and AIDS, malaria and other diseases:** Have halted by 2015 and begun to reverse the spread of HIV and AIDS.

This chapter includes information related to antenatal, childbirth and postpartum care. Information on antenatal care, delivery and postnatal care can help to identify problems and subgroups of women who are not accessing these services. The 2007 NDHS obtained information on antenatal care from women who reported having a live birth in the five years preceding the survey.

Women were asked about the type of healthcare personnel who provided antenatal care, the number of times they attended, and the stage of pregnancy when they first attended. Women were also asked about the components of care including information given, testing and treatments.

Respondents were also asked about the place of the delivery for the birth, the health providers who delivered the child, and whether they had a natural birth or caesarean section.

Information obtained on postnatal care included timing of the postnatal checkup and the type of personnel who provided postnatal care.

Information is provided in association with background characteristics for women, including age at last childbirth, the birth order (first live birth through to six or more births), level of education, and wealth quintile for the household.

Overall, 323 women aged 15–49 reported having at least one live birth in the five years preceding the survey. Table 9.9 provides findings for responses on problems in accessing health care from all women aged 15–49 years (611 women).

All percentages shown in tables have been weighted to be proportional to the age and sex structure of the Nauruan adult women's population.

No statistical tests have been performed for the presented data, therefore, comparisons between population subgroups are general trends and observations, and should not be taken to be statistically significant differences. No comments or comparisons have been made for population subgroups with sample sizes of less than 50 respondents.

9.1 ANTENATAL CARE

The primary purpose of antenatal care is to identify and treat health problems that can occur during pregnancy. During antenatal care visits, women are screened for complications of pregnancy and advice is provided on a range of issues including place of delivery. Women with complications are also referred for specialist care. The NDHS collected information on antenatal care services for women who had given birth to a child in the five-year period prior to the survey (i.e. since 2002). If a woman received antenatal care from more than one healthcare provider, the provider with the highest level of qualifications was recorded.

Table 9.1 shows the reported types of health personnel who provided antenatal care by the mother's age at birth, birth order of the child, mother's level of education and wealth quintile for the household.

Table 9.1: Antenatal care

Percentage distribution of women aged 15–49 who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth, and the percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics, Nauru 2007

| Background characteristic | Doctor | Nurse/ midwife | Primary health care attendant | Traditional birth attendant | Other | No one | Total | Percentage receiving antenatal care from a skilled provider ¹ | Number of women |
|------------------------------|--------|-------------------|--|-----------------------------------|-------|--------|-------|---|-----------------------|
| Mother's age at birth | | | | | | | | | |
| <20 | * | * | * | * | * | * | 100.0 | 95.5 | 23 |
| 20–34 | 51.9 | 41.8 | 0.5 | 0.5 | 0.0 | 5.3 | 100.0 | 94.2 | 162 |
| 35–49 | * | * | * | * | * | * | 100.0 | 95.7 | 21 |
| Birth order | | | | | | | | | |
| 1 | (57.2) | (38.0) | (0.0) | (2.6) | (0.0) | (2.3) | 100.0 | (95.2) | 40 |
| 2–3 | 49.3 | 43.9 | 0.0 | 0.0 | 0.0 | 6.8 | 100.0 | 93.2 | 87 |
| 4–5 | 50.0 | 43.1 | 1.6 | 1.7 | 0.0 | 3.6 | 100.0 | 94.7 | 48 |
| 6+ | (65.8) | (31.1) | (0.0) | (0.0) | (3.0) | (0.0) | 100.0 | (97.0) | 30 |
| Mother's education | | | | | | | | | |
| Less than secondary | * | * | * | * | * | * | 100.0 | 100.0 | 4 |
| Secondary | 55.0 | 39.1 | 0.0 | 1.0 | 0.5 | 4.4 | 100.0 | 94.1 | 193 |
| More than secondary | * | * | * | * | * | * | 100.0 | 100.0 | 9 |
| Wealth quintile | | | | | | | | | |
| Lowest | (33.2) | (62.1) | (0.0) | (0.0) | (0.0) | (4.7) | 100.0 | (95.3) | 38 |
| Second | (66.6) | (29.3) | (0.0) | (0.0) | (2.2) | (1.9) | 100.0 | (95.9) | 42 |
| Middle | 56.2 | 31.3 | 1.6 | 2.1 | 0.0 | 8.8 | 100.0 | 89.1 | 48 |
| Fourth | (70.6) | (29.4) | (0.0) | (0.0) | (0.0) | (0.0) | 100.0 | (100.0) | 37 |
| Highest | (39.2) | (54.4) | (0.0) | (2.0) | (0.0) | (4.4) | 100.0 | (93.6) | 40 |
| Total | 53.4 | 40.7 | 0.4 | 0.9 | 0.4 | 4.2 | 100.0 | 94.5 | 205 |

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 source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.

¹ Skilled provider includes doctor, nurse, midwife, and auxiliary nurse/midwife.

Approximately one-half of the women reported that antenatal care was provided by a doctor (53 percent) and a further 40 percent reported that care was provided by a midwife or nurse. Only 4 percent of women reported that they did not seek antenatal care. This finding did not change in respect to the birth order for the pregnancy.

9.2 NUMBER OF ANTENATAL CARE VISITS AND TIMING OF FIRST VISIT

In line with guidelines by the World Health Organization (WHO), the Nauru Ministry of Health and Medical Services recommend that a woman having a normal pregnancy should attend regular antenatal care visits as outlined below. The first visit should take place during the first trimester. Information on antenatal care visits and the stage at which pregnant women seek antenatal care is presented in Table 9.2.

Frequency of visits (mothers without complications)

- 0–32 weeks: every four weeks
- 32–36 weeks: fortnightly
- 36–delivery: weekly

The results show that the median number of months of pregnancy at the first visit was about 6 months for those women with ANC care. Four in ten women reported that they attended on four or more occasions antenatal care during their most recent pregnancy in the last five years. A further 13 percent of women reportedly made between one and three antenatal care visits.

About 40 percent of women could not recall how many visits they had attended during their pregnancy. The majority of women reported waiting until the second or third trimester of their pregnancy before seeking antenatal care.

About one in five women attended for their first antenatal visit in the first four months of pregnancy (16.8 percent). Another one-third of women reported they were four to five months pregnant, and an additional one-third reported they were six to seven months pregnant at their first antenatal visit. One in ten women reported that they were in the final month of the pregnancy before seeking antenatal care.

Table 9.2: Number of antenatal care visits and timing of first visit

Percentage distribution of women aged 15–49 who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth, and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, Nauru 2007

| Number and timing of ANC visits | Total |
|---|-------|
| Number of ANC visits | |
| None | 6.5 |
| 1 | 6.3 |
| 2–3 | 7.0 |
| 4+ | 40.2 |
| Don't know/missing | 40.1 |
| Total | 100.0 |
| Number of months pregnant at time of first ANC visit | |
| No antenatal care | 4.2 |
| <4 | 16.8 |
| 4–5 | 34.2 |
| 6–7 | 30.9 |
| 8+ | 10.2 |
| Total | 100.0 |
| Number of women | 205 |
| Median months pregnant at first visit (for those with ANC) | 5.7 |
| Number of women with ANC | 197 |

Total includes eight women with missing information on number of months pregnant at time of first ANC visit.

9.3 COMPONENTS OF ANTENATAL CARE

The National Obstetrics Guidelines provide details of what care should be provided by health service providers during antenatal care. Health workers have been trained to offer these services.

In Nauru, antenatal care routine checkups involve:

- Recording patient's medical history
- Clinical examination (e.g. height, weight, blood pressure, pulse, pregnancy examination)
- Blood examination
- Urine examination
- Vaccination (tetanus)
- Ultrasound (if necessary).

The vast majority of women who received antenatal care reported they had been weighed (97.3 percent), had their blood pressure measured (97.9 percent), urine sample taken (93.7 percent) and blood taken (95.6 percent) during their most recent pregnancy (Table 9.3).

Approximately 40 percent of women who received antenatal care reported that during their most recent pregnancy they were given information about the signs of complications during pregnancy. This finding did not differ according to birth order of the pregnancy.

For women who reported a live birth in the last five years, over one-third reported that they took iron tablets or syrup during their last pregnancy (37.0 percent) and a small proportion reported taking medication for intestinal parasites (3.1 percent).

The discussion of the relationship between women's background and the use of ANC could be biased due to the very small number of cases in each subgroup. Therefore, caution is advised when interpreting these results.

Table 9.3: Components of antenatal care

Among women aged 15–49 with a live birth in the five years preceding the survey, the percentage who took iron tablets or syrup and drugs for intestinal parasites during the pregnancy of the most recent birth, and among women receiving antenatal care (ANC) for the most recent live birth in the five years preceding the survey, the percentage receiving specific antenatal services, according to background characteristics, Nauru 2007

| Background characteristic | Among women with a live birth in the last five years, the percentage who during the pregnancy of their last birth: | | | Among women who received antenatal care for their most recent birth in the last five years, the percentage with selected services: | | | | | Number of women with ANC for their most recent birth |
|------------------------------|--|--------------------------------|--|--|----------|-------------------------|--------------------|--------------------|--|
| | Took iron tablets or syrup | Took intestinal parasite drugs | Number of women with a live birth in the last five years | Informed of signs of pregnancy complications | Weighted | Blood pressure measured | Urine sample taken | Blood sample taken | |
| Mother's age at birth | | | | | | | | | |
| <20 | * | * | 23 | * | * | * | * | * | 23 |
| 20–34 | 37.0 | 3.9 | 162 | 37.7 | 98.5 | 99.0 | 94.7 | 97.2 | 153 |
| 35–49 | * | * | 21 | * | * | * | * | * | 21 |
| Birth order | | | | | | | | | |
| 1 | (36.6) | (0.0) | 40 | (44.2) | (92.6) | (91.5) | (87.4) | (85.2) | 39 |
| 2–3 | 36.2 | 4.3 | 87 | 34.4 | 99.1 | 99.1 | 95.8 | 97.7 | 81 |
| 4–5 | 34.4 | 3.6 | 48 | 40.4 | 96.6 | 100.0 | 93.3 | 100.0 | 47 |
| 6+ | (42.2) | (2.7) | 30 | (46.2) | (100.0) | (100.0) | (97.4) | (96.7) | 30 |
| Mother's education | | | | | | | | | |
| Less than secondary | * | * | 4 | * | * | * | * | * | 4 |
| Secondary | 35.6 | 3.3 | 193 | 39.5 | 97.6 | 98.6 | 94.6 | 96.6 | 184 |
| More than secondary | * | * | 9 | * | * | * | * | * | 9 |
| Wealth quintile | | | | | | | | | |
| Lowest | (36.1) | (9.4) | 38 | (40.0) | (97.9) | (97.9) | (93.7) | (97.9) | 36 |
| Second | (36.9) | (2.3) | 42 | (38.5) | (99.1) | (98.1) | (89.4) | (93.1) | 41 |
| Middle | 37.0 | 0.0 | 48 | (38.7) | (92.3) | (95.9) | (88.8) | (95.9) | 44 |
| Fourth | 43.4 | 2.1 | 37 | (41.0) | (97.9) | (97.9) | (97.9) | (95.3) | 37 |
| Highest | 30.6 | 2.4 | 40 | (39.9) | (100.0) | (100.0) | (100.0) | (96.0) | 38 |
| Total | 36.7 | 3.1 | 205 | 39.6 | 97.3 | 97.9 | 93.7 | 95.6 | 197 |

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.

9.4 TETANUS TOXOID IMMUNISATION

Neonatal tetanus is a leading cause of neonatal death in developing countries where a high proportion of deliveries are conducted at home or in places where hygienic conditions may be poor. Tetanus toxoid (TT) immunisation is given to pregnant women to prevent neonatal tetanus. If a woman has not received previous TT injections, then for full protection she should receive at least two doses of TT during pregnancy. However, if a woman was immunised before she became pregnant, she may not require TT injections during pregnancy, depending on the number of injections she has received and the timing of the last injection. According to WHO, in order for a woman to have lifetime protection against TT, five doses are required.

The 2007 NDHS collected information on whether women received at least two TT injections during their pregnancy and whether the pregnancy was protected against neonatal tetanus for the most recent live birth in the five years preceding the survey.

Less than one in five women (18.5 percent) reported receiving two or more TT injections during their most recent pregnancy. Table 9.4 shows that tetanus protection was less common for women as the birth order increased.

Table 9.4: Tetanus toxoid injections

Among mothers aged 15–49 with a live birth in the five years preceding the survey, the percentage receiving two or more tetanus toxoid injections during the pregnancy for the last live birth, and the percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, Nauru 2007

| Background characteristic | Percentage receiving two or more injections during last pregnancy | Percentage whose last birth was protected against neonatal tetanus ¹ | Number of mothers |
|------------------------------|---|---|-------------------|
| Mother's age at birth | | | |
| <20 | * | * | 23 |
| 20–34 | 18.5 | 23.8 | 162 |
| 35–49 | * | * | 21 |
| Birth order | | | |
| 1 | (18.3) | (21.4) | 40 |
| 2–3 | 23.7 | 30.0 | 87 |
| 4–5 | 14.6 | 22.5 | 48 |
| 6+ | (9.8) | (12.4) | 30 |
| Mother's education | | | |
| Less than secondary | * | * | 4 |
| Secondary | 18.9 | 24.4 | 193 |
| More than secondary | * | * | 9 |
| Wealth quintile | | | |
| Lowest | (17.0) | (28.6) | 38 |
| Second | (21.3) | (21.3) | 42 |
| Middle | (14.0) | (19.9) | 48 |
| Fourth | (18.3) | (25.2) | 37 |
| Highest | (22.2) | (26.2) | 40 |
| Total | 18.5 | 24.0 | 205 |

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.

¹ Includes mothers with two injections during the pregnancy of her last birth, or two or more injections (the last within three years of the last live birth), or three or more injections (the last within five years of the last birth), or four or more injections (the last within ten years of the last live birth), or five or more injections prior to the last birth.

Overall, one in four women reported their last pregnancy was protected against neonatal tetanus, through either the current or previous immunisations (see definition in Table 9.4). This increased from the first birth to the third births but then declining as birth order increased.

However, caution is also advisable when interpreting these results as the numbers are so small.

9.5 PLACE OF DELIVERY

Factors associated with a successful birth include the place of delivery, disinfection practices used within the birthing facility, available birthing equipment, and the skills and performance of the personnel who assist in the birthing. Table 9.5 shows the proportions of women who gave birth within the public and private health facilities, and the overall proportion who gave birth within a recognised healthcare facility by background characteristics.

Table 9.5: Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Nauru 2007

| Background characteristic | Health facility | | | Total | Percentage delivered in a health facility | Number of births |
|--|-----------------|----------------|---------|-------|---|------------------|
| | Public sector | Private sector | Missing | | | |
| Mother's age at birth | | | | | | |
| <20 | 88.0 | 7.6 | 4.3 | 100.0 | 95.7 | 54 |
| 20–34 | 93.4 | 5.9 | 0.7 | 100.0 | 99.3 | 239 |
| 35–49 | (97.3) | (2.7) | (0.0) | 100.0 | (100.0) | 28 |
| Birth order | | | | | | |
| 1 | 86.5 | 12.6 | 0.9 | 100.0 | 99.1 | 81 |
| 2–3 | 92.8 | 5.4 | 1.8 | 100.0 | 98.2 | 131 |
| 4–5 | 96.1 | 2.5 | 1.4 | 100.0 | 98.6 | 74 |
| 6+ | (100.0) | (0.0) | (0.0) | 100.0 | (100.0) | 37 |
| Mother's education | | | | | | |
| Less than secondary | * | * | * | 100.0 | 100.0 | 5 |
| Secondary | 93.9 | 5.3 | 0.9 | 100.0 | 99.1 | 302 |
| More than secondary | * | * | * | 100.0 | 90.2 | 15 |
| Antenatal care visits¹ | | | | | | |
| None | * | * | * | 100.0 | 100.0 | 13 |
| 1–3 | (100.0) | (0.0) | (0.0) | 100.0 | (100.0) | 27 |
| 4+ | 95.5 | 4.5 | 0.0 | 100.0 | 100.0 | 83 |
| Don't know/missing | 93.4 | 5.6 | 1.0 | 100.0 | 99.0 | 74 |
| Wealth quintile | | | | | | |
| Lowest | 100.0 | 0.0 | 0.0 | 100.0 | 100.0 | 61 |
| Second | 100.0 | 0.0 | 0.0 | 100.0 | 100.0 | 69 |
| Middle | 89.0 | 8.8 | 2.2 | 100.0 | 97.8 | 69 |
| Fourth | 91.3 | 4.3 | 4.3 | 100.0 | 95.7 | 60 |
| Highest | 83.4 | 16.6 | 0.0 | 100.0 | 100.0 | 63 |
| Total | 92.8 | 5.9 | 1.3 | 100.0 | 98.7 | 322 |

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.

¹ Includes only the most recent birth in the five years preceding the survey.

The vast majority of women who reported having a live birth in the last five years indicated that they had delivered the baby in a recognised health facility (98.7 percent). Of these, the majority reported giving birth in a public facility (92.8 percent). Because the only health facility in Nauru is the Republic of Nauru Hospital, women who gave birth in a private facility would have given birth off the island.

Table 9.5 shows that women who were having their first child were more likely to have their child in a private sector health facility (off island), compared with women who were having their four or later birth.

All women who were within the lowest and second to lowest wealth quintiles gave birth in a public health facility. In contrast, 16.6 percent of women from the highest wealth quintile gave birth in a private sector facility (off island).

9.6 ASSISTANCE DURING CHILDBIRTH

In addition to place of birth, assistance during childbirth is an important factor that influences the birth outcome, and the subsequent health of the mother and infant(s). The knowledge, skills and performance of the birth attendant impact on identification and management of complications of childbirth and compliance with hygienic practices.

Table 9.6 provides information on the person who assisted with the delivery of the child by background characteristics for women who reported having a live birth in the last five years.

Overall, the majority of women reported that their child was delivered by a skilled health provider (97.4 percent). One in thirteen women (7.5 percent) reported giving birth by caesarean section.

Approximately one in ten women aged less than 20 years reported that a relative or other person had assisted with the birth.

A higher proportion of women aged 20 and older reported that a nurse or midwife had assisted with the birth compared with those aged less than 20 years.

Table 9.6 shows a trend towards greater likelihood of a nurse or midwife assisting with births as the birth order increased, while the likelihood of a doctor assisting decreased with subsequent births.

Table 9.6: Assistance during delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, percentage of births assisted by a skilled provider and percentage delivered by caesarean section, according to background characteristics, Nauru 2007

| Background characteristic | Person providing assistance during delivery | | | | Total | Percentage delivered by a skilled provider ¹ | Percentage delivered by C-section | Number of births |
|------------------------------|---|----------------|-----------------|-------|-------|---|-----------------------------------|------------------|
| | Doctor | Nurse/ midwife | Relative/ other | Other | | | | |
| Mother's age at birth | | | | | | | | |
| <20 | 36.6 | 54.0 | 9.4 | | 100.0 | 90.6 | 6.0 | 54 |
| 20-34 | 23.0 | 75.6 | 1.4 | | 100.0 | 98.6 | 7.0 | 239 |
| 35-49 | (35.0) | (65.0) | (0.0) | | 100.0 | (100.0) | (15.1) | 28 |
| Birth order | | | | | | | | |
| 1 | 36.9 | 60.7 | 2.4 | | 100.0 | 97.6 | 7.3 | 81 |
| 2-3 | 25.9 | 70.0 | 4.2 | | 100.0 | 95.8 | 8.5 | 131 |
| 4-5 | 13.8 | 84.8 | 1.4 | | 100.0 | 98.6 | 7.1 | 74 |
| 6+ | (30.4) | (69.6) | (0.0) | | 100.0 | (100.0) | (5.5) | 37 |
| Mother's education | | | | | | | | |
| Less than secondary | * | * | * | | 100.0 | * | * | 5 |
| Secondary | 26.6 | 71.1 | 2.3 | | 100.0 | 97.7 | 7.8 | 302 |
| More than secondary | * | * | * | | 100.0 | * | * | 15 |
| Wealth quintile | | | | | | | | |
| Lowest | 24.0 | 73.4 | 2.6 | | 100.0 | 97.4 | 7.9 | 61 |
| Second | 25.5 | 74.5 | 0.0 | | 100.0 | 100.0 | 4.5 | 69 |
| Middle | 31.3 | 62.6 | 6.1 | | 100.0 | 93.9 | 10.2 | 69 |
| Fourth | 29.2 | 69.1 | 1.7 | | 100.0 | 98.3 | 1.2 | 60 |
| Highest | 21.7 | 75.8 | 2.5 | | 100.0 | 97.5 | 13.7 | 63 |
| Total | 26.4 | 71.0 | 2.6 | | 100.0 | 97.4 | 7.5 | 322 |

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 the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.

Total includes four women with missing information on type of place of delivery who are not shown separately.

¹ Skilled provider includes doctor, nurse, midwife and auxiliary nurse/midwife.

9.7 POSTPARTUM CARE

Postpartum care is important, both for the mother and for the child, to treat complications arising from the delivery as well as to provide the mother with important information on how to care for herself and her child. The postpartum period, also known as the puerperium, is defined as the time between delivery of the placenta and 42 days (6 weeks) following delivery. Timing of postpartum care is important. The first two days after delivery are critical, because most maternal and neonatal deaths occur during this period. Protocol for postnatal care hasn't been developed in Nauru obstetrics, health and medical services guidelines.

Of the 205 women who reported having a live birth in the last five years, about one in five births (17.5 percent) were not accompanied by a postnatal check. Only 30 percent of women reported having a postnatal check in the first four hours period following delivery. This finding is at odds with previous information where 98.7 percent of women reported giving birth in a health facility (Table 9.5), where care should have been provided for at least 24 hours after giving birth.

Table 9.7: Timing of first postnatal checkup

Among women aged 15–49 giving birth in the five years preceding the survey, the percentage distribution of the mother's first postnatal check-up for the last live birth by time after delivery, according to background characteristics, Nauru 2007

| Background characteristic | Timing after delivery of mother's first postnatal checkup | | | | | No postnatal checkup ¹ | Total | Number of women |
|------------------------------|---|------------|--------|-----------|--------------------|-----------------------------------|-------|-----------------|
| | Less than 4 hours | 4–23 hours | 2 days | 3–41 days | Don't know/missing | | | |
| Mother's age at birth | | | | | | | | |
| <20 | * | * | * | * | * | * | 100.0 | 23 |
| 20–34 | 27.1 | 11.1 | 27.9 | 3.9 | 12.8 | 17.2 | 100.0 | 162 |
| 35–49 | * | * | * | * | * | * | 100.0 | 21 |
| Birth order | | | | | | | | |
| 1 | (33.9) | (4.8) | (21.1) | (5.4) | (13.6) | (21.1) | 100.0 | 40 |
| 2–3 | 26.2 | 11.5 | 23.8 | 4.2 | 13.0 | 21.4 | 100.0 | 87 |
| 4–5 | 32.3 | 16.4 | 29.2 | 0.0 | 5.8 | 16.3 | 100.0 | 48 |
| 6+ | 33.5 | 5.3 | 26.8 | 6.0 | 25.3 | 3.0 | 100.0 | 30 |
| Education | | | | | | | | |
| Less than secondary | * | * | * | * | * | * | 100.0 | 4 |
| Secondary | 31.0 | 9.5 | 25.9 | 3.7 | 13.7 | 16.2 | 100.0 | 193 |
| More than secondary | * | * | * | * | * | * | 100.0 | 9 |
| Wealth quintile | | | | | | | | |
| Lowest | (33.4) | (4.2) | (27.1) | (3.4) | (21.2) | (10.8) | 100.0 | 38 |
| Second | (37.3) | (4.7) | (30.6) | (4.0) | (5.9) | (17.4) | 100.0 | 42 |
| Middle | (26.1) | (11.9) | (22.3) | (7.7) | (11.8) | (20.3) | 100.0 | 48 |
| Fourth | (27.7) | (19.4) | (19.4) | (0.0) | (12.1) | (21.4) | 100.0 | 37 |
| Highest | (27.0) | (12.1) | (25.6) | (2.4) | (16.1) | (16.8) | 100.0 | 40 |
| Total | 30.2 | 10.4 | 25.0 | 3.7 | 13.2 | 17.5 | 100.0 | 205 |

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

¹ Includes women who received a checkup after 41 days.

The proportion of mothers receiving postnatal check-up within less than 4 hours increased from second birth order to more than six birth order. Women were more likely to have postnatal check-up as birth order increased. For example 21 percent had no postnatal check-up at birth order 2–3 and this declined to only 3 percent with no postnatal check-up at birth order of more than six.

9.8 TYPE OF PROVIDER FOR THE FIRST POSTPARTUM CHECKUP

The skills level of a provider is important as this determines the ability to diagnose problems and to recommend appropriate treatment or referral for women in the postnatal period.

Of the women who had a postnatal check, the vast majority reported that they had been attended to by a doctor, nurse or midwife. The findings in Table 9.8 are similar, irrespective of the mothers' age, birth order, education and wealth quintile.

Table 9.8: Type of provider of first postnatal check-up

Among women aged 15–49 giving birth in the five years preceding the survey, the percentage distribution by type of provider of the mother's first postnatal health check for the last live birth, according to background characteristics, Nauru 2007

| Background characteristic | Type of health provider of mother's first postnatal check-up | | | | Total | Number of women |
|------------------------------|--|-------|--------------------|-----------------------------------|-------|-----------------|
| | Doctor/nurse/midwife | Other | Don't know/missing | No postnatal checkup ¹ | | |
| Mother's age at birth | | | | | | |
| <20 | * | * | * | * | 100.0 | 23 |
| 20–34 | 80.6 | 1.2 | 1.1 | 17.2 | 100.0 | 162 |
| 35–49 | * | * | * | * | 100.0 | 21 |
| Birth order | | | | | | |
| 1 | (78.9) | (0.0) | (0.0) | (21.1) | 100.0 | 40 |
| 2–3 | 76.4 | 2.2 | 0.0 | 21.4 | 100.0 | 87 |
| 4–5 | 80.1 | 0.0 | 3.5 | 16.3 | 100.0 | 48 |
| 6+ | (97.0) | (0.0) | (0.0) | (3.0) | 100.0 | 30 |
| Education | | | | | | |
| Less than secondary | * | * | * | * | 100.0 | 4 |
| Secondary | 81.9 | 1.0 | 0.9 | 16.2 | 100.0 | 193 |
| More than secondary | * | * | * | * | 100.0 | 9 |
| Wealth quintile | | | | | | |
| Lowest | (89.2) | (0.0) | (0.0) | (10.8) | 100.0 | 38 |
| Second | (77.7) | (2.8) | (2.2) | (17.4) | 100.0 | 42 |
| Middle | 76.5 | 1.6 | 1.7 | 20.3 | 100.0 | 48 |
| Fourth | (78.6) | (0.0) | (0.0) | (21.4) | 100.0 | 37 |
| Highest | (83.2) | (0.0) | (0.0) | (16.8) | 100.0 | 40 |
| Total | 80.8 | 0.9 | 0.8 | 17.5 | 100.0 | 205 |

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.

¹ Includes women who received a check-up after 41 days.

9.9 PROBLEMS ENCOUNTERED IN ACCESSING HEALTH CARE

Many factors can prevent women from receiving medical advice or treatment. Information on barriers to accessing services and treatment is particularly important in understanding and addressing the problems women may face in when seeking medical care.

The 2007 NDHS asked women about a range of problems that could reduce accessibility to health care. Women who responded that each of the potential problems for accessing health care listed in Table 9.9 were a 'big problem'. The proportions of women who agree that factors were a 'big problem' for are shown by background characteristics.

Over 90 percent of women reported that at least one of the factors outlined below was an important access issue for them. The most common concern was the availability of drugs (82.1 percent), followed by concerns about the availability of health providers (69.8 percent). In

addition, over four in ten women were concerned that there may not be a female health provider available (42.5 percent).

Distance to the health facility and 'having to take transport' were considered to be important issues for approximately half of the women who were interviewed.

One third of female respondents (34.3 percent) were concerned about having to access medical care on their own.

Over one-quarter of women (25.8 percent) reported that getting money for treatment was a big problem for them, and one in ten women were concerned about getting permission to attend for health care.

By background characteristics, more than half the number of young women aged 15–19 reported having problem in accessing health care on their own (66 percent) and were concerned that no female was provider available (64%) at the health centre to assist them.

A problem of getting money for treatment increased as the age of women increased, while the problem of getting permission to go for treatment declined with an increasing age of women. Almost the same proportion of unemployed and employed women reported getting money for treatment.

Table 9.9: Problems in accessing health care

Percentage of women aged 15–49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Nauru 2007

| Background characteristic | Problems in accessing health care | | | | | | | | | | Number of women |
|----------------------------------|--|-----------------------------|-----------------------------|--------------------------|-------------------------|--------------------------------------|-------------------------------|----------------------------|--|-----|-----------------|
| | Getting permission to go for treatment | Getting money for treatment | Distance to health facility | Having to take transport | Not wanting to go alone | Concern no female provider available | Concern no provider available | Concern no drugs available | At least one problem accessing health care | | |
| Age | | | | | | | | | | | |
| 15–19 | 15.6 | 23.8 | 53.1 | 50.8 | 66.3 | 64.2 | 79.4 | 87.4 | 97.3 | 117 | |
| 20–34 | 10.1 | 24.9 | 45.4 | 49.8 | 32.0 | 39.7 | 70.7 | 83.5 | 94.2 | 312 | |
| 35–49 | 7.3 | 28.0 | 41.9 | 47.7 | 18.3 | 33.6 | 62.4 | 76.6 | 84.7 | 189 | |
| Number of living children | | | | | | | | | | | |
| 0 | 12.5 | 24.2 | 50.0 | 48.8 | 55.3 | 54.7 | 72.5 | 82.0 | 93.2 | 245 | |
| 1–2 | 7.9 | 29.6 | 41.8 | 52.1 | 26.7 | 36.5 | 71.5 | 84.5 | 93.9 | 155 | |
| 3–4 | 9.7 | 26.4 | 37.2 | 42.8 | 11.6 | 28.4 | 63.0 | 77.2 | 86.1 | 106 | |
| 5+ | 9.4 | 22.7 | 50.1 | 53.0 | 20.4 | 37.4 | 68.1 | 83.8 | 91.7 | 113 | |
| Marital status | | | | | | | | | | | |
| Never married | 12.0 | 24.4 | 49.5 | 51.0 | 57.6 | 58.3 | 74.3 | 83.4 | 95.6 | 186 | |
| Married or living together | 9.4 | 25.2 | 43.4 | 46.6 | 22.0 | 33.7 | 66.3 | 81.2 | 90.1 | 386 | |
| Divorced/separated/widowed | (10.8) | (34.6) | (51.3) | (66.3) | (43.3) | (51.7) | (80.8) | (85.2) | (91.5) | 46 | |
| Employed last 12 months | | | | | | | | | | | |
| Not employed | 14.5 | 26.0 | 50.6 | 54.5 | 46.6 | 50.5 | 72.5 | 84.9 | 95.7 | 279 | |
| Employed | 6.8 | 25.4 | 41.8 | 45.2 | 24.2 | 35.9 | 67.6 | 79.8 | 88.7 | 339 | |
| Education | | | | | | | | | | | |
| Less than secondary | * | * | * | * | * | * | * | * | * | 13 | |
| Secondary | 10.7 | 24.2 | 45.3 | 49.4 | 34.4 | 43.8 | 70.4 | 83.0 | 93.1 | 555 | |
| More than secondary | 4.1 | 41.1 | 47.0 | 48.2 | 28.3 | 28.1 | 64.6 | 71.7 | 77.8 | 50 | |
| Wealth quintile | | | | | | | | | | | |
| Lowest | 16.9 | 21.9 | 56.0 | 55.6 | 46.0 | 52.9 | 76.1 | 84.7 | 95.1 | 127 | |
| Second | 7.2 | 27.3 | 51.8 | 52.4 | 29.5 | 34.1 | 58.2 | 78.8 | 90.1 | 126 | |
| Middle | 13.6 | 25.8 | 44.1 | 50.5 | 35.6 | 44.8 | 73.7 | 84.6 | 92.8 | 129 | |
| Fourth | 8.3 | 26.9 | 42.8 | 48.6 | 28.7 | 43.4 | 70.0 | 79.0 | 91.1 | 116 | |
| Highest | 4.8 | 26.6 | 33.3 | 39.0 | 30.8 | 36.7 | 71.0 | 83.3 | 90.0 | 119 | |
| Total | 10.3 | 25.7 | 45.8 | 49.4 | 34.3 | 42.5 | 69.8 | 82.1 | 91.9 | 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.

9.10 KEY RESULTS

This section summarises the major findings related to reproductive health issues in Nauru that can direct policy-makers, health programme managers and development partners to improve areas that are in needs of such services.

The majority of women who reported having a live birth in the last five years were attended to by a skilled health provider during antenatal care for their most recent birth (94.5 percent). However, the survey identified some issues for consideration regarding the timing and number of antenatal care visits. Only one in six women (16.8 percent) attended their first visit during the first trimester of pregnancy, and only 40 percent of women reported attending for the recommended four or more antenatal visits during their pregnancy. These findings highlight a need to develop strategies for encouraging women to attend for care earlier in their pregnancy and to attend more regularly during the pregnancy.

While the vast majority of women who attended antenatal care during their most recent pregnancy reported having received all of routine care (i.e. were weighed, had blood pressure measured, and urine and blood samples taken), only 40 percent reported being given information about the signs of complications of pregnancy. This finding indicates a need to determine whether women are routinely provided this information when attending for antenatal care.

One in four women (24 percent) indicated that their most recent birth in the last five years was protected against neonatal tetanus. If considered appropriate for Nauru, then procedures should be established to ensure immunisation against neonatal tetanus for pregnant women.

The vast majority of women (98.7 percent) who reported having a live birth in the last five years indicated that they had delivered the baby in a recognised health facility, and overall the majority (97.4 percent) reported they were attended by a skilled health provider. Of concern is that one in six women (17.5 percent) reported that they did not have a postnatal check. Further investigation would be valuable to ascertain whether some women are missing out on the postnatal check and if so, to determine strategies to overcome this problem.

Over 90 percent of all women who participated in the 2007 NDHS reported at least one problem with accessing health care in Nauru. The two most common concerns raised were the availability of medications (82.1 percent of respondents) and the availability of health providers (69.8 percent of respondents).

Other common problems included distance to the health facility (45.8 percent of respondents), having to take transport (49.4 percent of respondents), and concern about the availability of a female provider (42.5 percent of respondents). These issues should be considered when developing strategies for improving women's access to health care.