CHAPTER 7 FERTILITY PREFERENCES

This chapter addresses three questions that help ascertain the need for contraception. Does the respondent want more children? If so, how long would she prefer to wait before the next child? If she could start afresh, how many children in all would she want? Two further issues are examined. To what extent do unwanted or mistimed pregnancies occur? What effect would the prevention of such pregnancies have on fertility rates? Bearing in mind that the underlying rationale of most family planning programmes is to give couples the freedom and ability to bear the number of children they want, and to achieve the spacing of births they prefer, the importance of this chapter is obvious.

The 2006/2007 SIDHS included questions to elicit fertility preferences. Women who were either not pregnant or unsure about their status were asked the question: *'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. Pregnant women were asked: *'After the child you are expecting, would you like to have another child or would you prefer not to have any more children?'* The 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 to state the total number of children they would like to have, as well as their sex preference for the child, if they were to start childbearing afresh.

Given the ongoing family planning programmes that address both men and women, and given that men play a vital role in realising reproductive goals, the 2006/2007 SIDHS included questions that elicited information on men's fertility preferences.

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 aged 15–49 by desire for children according to the number of living children. Overall, about 50% of currently married women and 41% of currently married men want no more children, and were sterilised, and about 17% of currently married women and 18% of currently married men want to have another child later, after two years, while 10% of currently married women and 8% of currently married men want to have another child soon, or within two years of the birth of their youngest living child. Only 4% of currently married women and 2% of currently married men are infecund.

Table 7.1 also shows that the proportion of both currently married women and men who want another child soon after the birth of their youngest living child declines with an increase in the number of living children. This result clearly shows that fertility preference in Solomon Islands diminishes as the number of living children increases. This finding is further supported by the pattern observed in the proportion of women and men wanting no more children, which increases with the increased number of living children. Considering the above result, there is obviously a need and/or desire for birth spacing and limiting in Solomon Islands.

Table 7.1: Fertility preferences by number of living children

Percent distribution of currently married women and currently married men age 15-49 by desire for children, according to number of living children, Solomon Islands 2007

Desire for children	Number of living children							Total 15-49	50+	Total men 15+
	0	1	2	3	4	5	6+			
WOMEN[1]										
Have another soon[2]	40.5	16.4	11.6	6.5	6.1	4.9	0.6	10.1	na	na
Have another later[3]	13.1	47.4	33.3	17.7	5.4	4.8	0.7	16.7	na	na
Have another, undecided when	4.9	6.0	5.0	4.3	1.8	1.3	0.4	3.2	na	na
Undecided	14.3	15.6	21.6	21.3	19.1	12.6	9.1	16.5	na	na
Want no more	12.3	6.8	22.0	39.2	41.6	47.1	58.0	34.9	na	na
Sterilized[4]	1.8	0.8	2.9	7.8	21.5	24.7	27.6	13.6	na	na
Declared infecund	12.9	6.8	3.0	2.7	3.0	3.0	3.0	4.3	na	na
Missing	0.1	0.1	0.6	0.5	1.4	1.6	0.5	0.8	na	na
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0
Number	219	315	400	423	440	320	442	2,560	0	0
MEN[5]										
Have another soon[2]	28.5	14.1	9.1	7.6	2.9	0.6	1.1	8.4	0.1	6.0
Have another later[3]	2.9	38.3	34.5	22.2	9.4	9.0	0.5	17.8	0.3	12.8
Have another, undecided when	22.9	6.8	7.8	4.3	2.7	4.0	1.7	6.5	0.2	4.7
Undecided	10.4	30.0	23.5	25.5	13.8	19.3	18.4	20.6	4.7	16.1
Want no more	10.6	8.8	17.3	34.1	62.7	59.4	69.5	37.8	79.6	49.8
Sterilized[4]	4.3	0.2	1.6	2.1	4.4	3.8	4.2	2.9	8.3	4.4
Declared infecund	12.7	0.0	0.7	1.1	0.3	1.2	1.0	2.0	4.5	2.7
Missing	7.7	1.8	5.5	3.1	3.9	2.7	3.7	4.0	2.4	3.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	98	129	163	154	148	116	132	939	375	1,314

NA=Not applicable
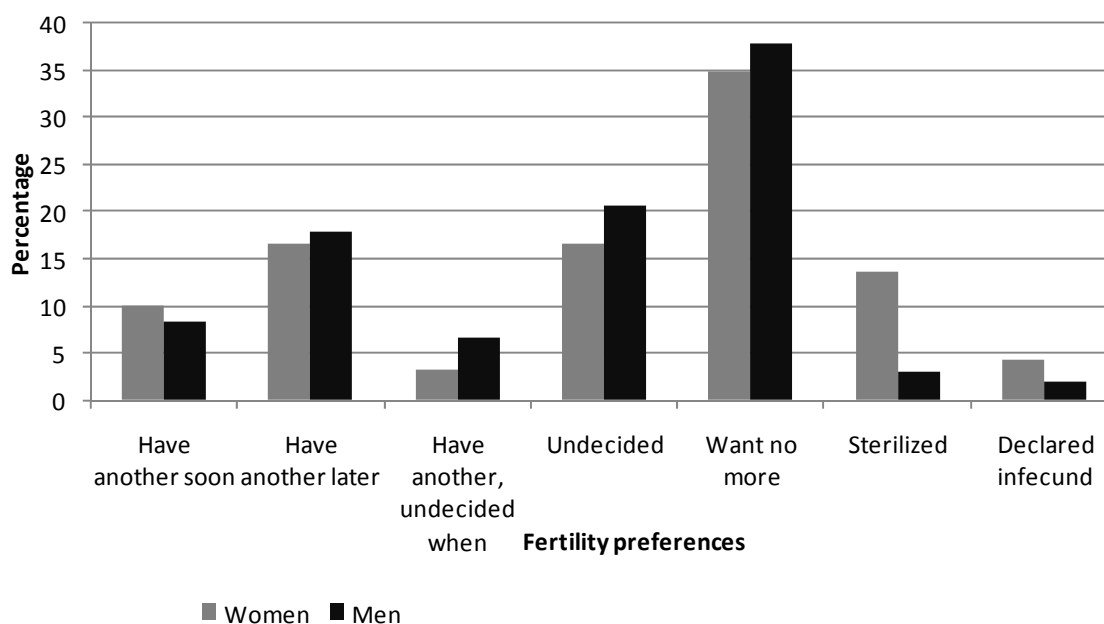[1] The number of living children includes current pregnancy for women
[2] Wants next birth within 2 years
[3] Wants to delay next birth for 2 or more years
[4] Includes both female and male sterilization
[5] The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Figure 7.1: Fertility preference among currently married women and men aged 15–19, Solomon Islands

7.2   DESIRE TO LIMIT CHILDBEARING BY BACKGROUND CHARACTERISTICS

Tables 7.2.1 and 7.2.2 present the percentage of currently married women and men who want no more children, by the number of living children they have and according to their background characteristics. As shown, more than four out of ten currently married women and men want no more children, and there is no substantial difference in the proportion of those wanting no more children or limiting the number of children by both sexes (48% women, 41% men). However, variation was observed in the proportion of desire to limit childbearing among urban and rural dwellers. Overall, the proportion of women and men who desire to limit childbearing is higher among rural dwellers than urban dwellers. For instance, 50% of women in rural areas want to limit the number of children, as opposed to 37% of urban women. Similarly, 42% of men in rural areas want to limit the number of children, as opposed to 37% of urban men. As also shown, the desire to limit childbearing increases with the number of living children, and the proportion is equally displayed in both currently married women and men.

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Table 7.2.1: Desire to limit childbearing: Women

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Solomon Islands 2007

| Background characteristic | Number of living children[1] | | | | | | | Total |
	0	1	2	3	4	5	6+	
Residence								
Urban	5.4	12.8	20.0	39.3	56.1	72.4	71.5	36.7
Rural	16.4	6.2	25.8	48.2	64.3	71.7	87.1	50.4
Region								
Honiara	7.0	11.6	21.4	34.7	53.6	69.3	71.5	35.3
Guadalcanal	0.0	10.0	31.9	51.3	51.8	74.2	84.0	47.3
Malaita	0.0	10.7	24.0	28.3	55.8	(61.8)	77.4	41.4
Western	0.0	1.6	19.4	(49.9)	70.5	(82.7)	(79.6)	48.7
Other provinces	35.6	4.3	24.6	56.4	73.0	73.8	97.5	57.6
Education								
No education	23.4	(20.6)	(40.9)	30.1	58.1	56.2	81.5	53.6
Primary	13.9	5.7	21.9	48.7	66.4	72.9	86.9	51.2
Secondary	13.2	7.8	25.7	48.4	53.6	(89.9)	(87.5)	36.7
More than secondary	1.4	*	(21.4)	(62.9)	*	*	*	40.5
Wealth quintile								
Lowest	24.7	11.9	34.3	48.1	72.5	72.7	88.2	57.8
Second	31.5	3.3	19.2	62.9	72.8	(77.3)	86.6	55.1
Middle	21.1	7.1	26.6	42.7	58.5	(55.8)	84.5	45.6
Fourth	2.2	6.1	22.6	31.0	51.8	73.0	84.0	40.5
Highest	2.8	10.9	21.2	53.9	61.9	75.2	83.9	44.0
Total	14.1	7.6	24.9	47.0	63.2	71.8	85.6	48.4

Note: Women who have been sterilized are considered to want no more children.
Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] The number of living children includes the current pregnancy.

Table 7.2.2: Desire to limit childbearing: Men

Percentage of currently married men age 15+ who want no more children, by number of living children, according to background characteristics, Solomon Islands 2007

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	8.0	8.4	11.2	29.4	63.1	70.9	83.2	37.1
Rural	16.2	9.3	20.2	37.6	68.1	61.5	72.7	41.5
Region								
Honiara	10.6	4.5	13.1	36.3	58.2	67.1	79.8	35.9
Guadalcanal	13.2	(25.5)	(10.1)	(28.7)	(45.5)	(61.5)	90.1	38.3
Malaita	0.0	(0.0)	(21.1)	(13.1)	(53.5)	(51.0)	40.1	26.1
Western	17.4	*	*	*	*	*	(57.3)	45.2
Other provinces	22.6	*	(27.3)	(53.4)	(88.8)	(64.1)	95.0	52.7
Education								
No education	0.0	*	*	*	*	*	36.4	24.4
Primary	26.3	16.8	14.6	32.6	63.7	68.0	79.4	44.9
Secondary	10.8	1.9	24.7	35.4	73.8	(67.8)	(70.0)	36.8
More than secondary	0.0	*	*	(56.3)	(66.5)	*	*	39.8
Wealth quintile								
Lowest	10.2	*	(7.0)	(31.0)	(55.1)	(51.0)	68.9	35.1
Second	25.7	*	*	(12.1)	(86.2)	(76.3)	81.5	47.6
Middle	0.0	(20.6)	(31.6)	(47.9)	(71.8)	(30.8)	(50.5)	36.4
Fourth	18.4	(10.9)	(26.0)	(40.9)	(72.1)	(94.5)	85.4	45.9
Highest	11.4	7.1	10.6	41.0	57.2	70.4	76.5	38.0
Total 15-49	14.9	9.0	18.9	36.2	67.1	63.2	73.7	40.7
50+	*	*	*	(82.6)	(95.4)	72.8	94.0	87.9
Total men 15+	17.6	10.3	27.2	43.1	74.5	66.6	85.8	54.2

Note: Men who have been sterilized or who state in response to the question about desire for children that their wife has been sterilized are considered to want no more children.
Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] 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 7.2: Percentage of currently married women and men aged 15–49 who want no more children by number of living children
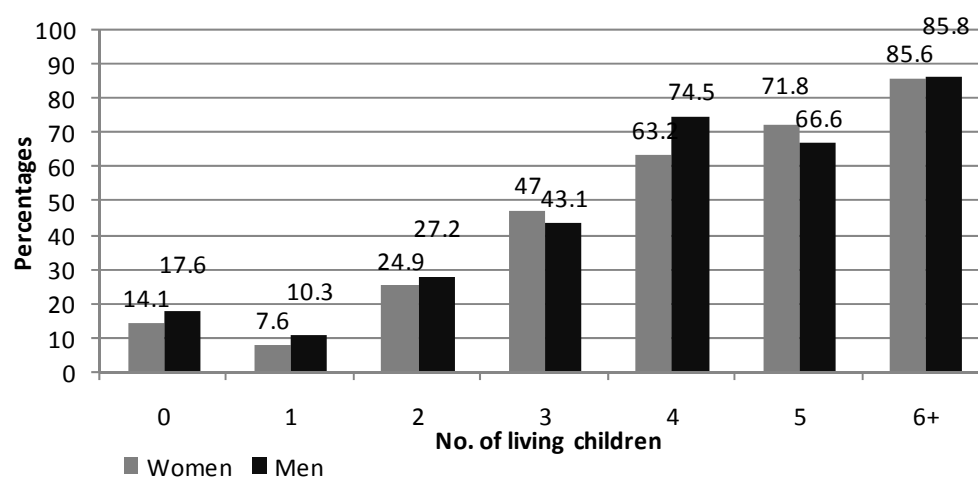
A large proportion of women with no education or only a primary level of education expressed a desire to limit their family as opposed to the proportion of women with a secondary and higher level of education. This finding clearly indicates that there is a strong link between women's educational attainment and preference for family size, such that women with a higher educational attainment are more likely to meet their desire to limit childbearing, thus the proportion of women who desire to limit childbearing in this category is low. Conversely, women with low educational attainment or no education at all are less likely to meet their desire to limit childbearing, and thus their proportion, as illustrated in Table 7.2.1, is high. Furthermore, the findings of this survey may also reflect women's social status in Solomon Islands; the lower a women's educational attainment, the less likely she is to be able to meet her desire to limit the number of children.

A comparison across the provinces reveals that currently married women in other provinces collectively account for 58%, while 49% of women in Western Province, 47% in Guadalcanal Province, 41% in Malaita Province, and only 35% in Honiara expressed a need or desire to limit their childbearing. Again, this result may indicate that women in Honiara are more likely to meet their desire to limit their childbearing as opposed to women in other provinces, particularly Western, Guadalcanal and Malaita.

The results also reveal that there is a strong link between wealth and preference to family size. For instance, the proportion of women who wish to limit their childbearing is higher in the lower wealth quintiles than those in the upper wealth quintiles, where the proportion of women who desire to limit childbearing decreases as the wealth quintile increases. This result clearly shows that women in the lower wealth quintiles are less likely to meet their desire to limit their family size, thus their proportion is higher (see Table 7.2.1). On the other hand, women from the upper and/or highest wealth quintile are more likely to meet their desire to limit childbearing, thus few of them expressed their desire to do so.

7.3   NEED FOR FAMILY PLANNING SERVICES

In the 2006/2007 SIDHS, women who indicated that they either want no more children (limiters) or want to wait two or more years before having another child (spacers), but are not using contraception, constitute a group that has an *unmet need for family planning*. Women who are currently using a family planning method are considered to have a met need for family planning. Women with an unmet need for family planning and those currently using contraception form the total demand for family planning.

Table 7.3.1 presents the proportion of the unmet need, met need, and the total demand for family planning services for currently married women. Overall, 11% of currently married women have an unmet need for family planning services. Of these women, 7% were birth spacers and 4% for birth limiters, and about 35% are currently using contraceptive methods. This constitutes the overall met needs for family planning in Solomon Islands. The total demand for family planning on the other hand is estimated to be 46%, while the demand satisfied accounts for 76%.

A substantial difference was noted in the level of unmet need 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 than in older women. The table also shows that the proportion of unmet needs is higher for birth spacing, particularly among younger married women (aged 15–29) as opposed to birth limiting; however, as women's age increases, the proportion of unmet need is higher in birth limiting as opposed to birth spacing. This result 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 birth spacing. In other words, the demand for birth spacing is more common in younger women while demand for birth limiting is more common in older women.

A similar pattern was also observed for met needs. The proportion of met needs is higher for birth spacing than for birth limiting at younger age groups. For birth spacing, the proportion of met needs decreases with increased age, whereas for birth limiting, the proportion of met needs increases with women's age. This result 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. It is also obvious from Table 7.3.1 that the proportion of met needs increases with women's age.

A substantial variation was also noted in the unmet needs of urban and rural dwellers. As shown, 12% of rural women expressed an unmet need for family planning as opposed to 8% of urban women. For rural women, the proportion expressing an unmet need for birth spacing is higher than for birth limiting, whereas for urban women, the proportion is higher for birth limiting than birth spacing. This result indicates that the demand for birth limiting is higher among women in urban areas than in rural areas, whereas the demand for birth spacing is higher among women in rural areas than in urban areas. For met needs, the demand for family planning is mostly used for birth limiting rather than for birth spacing. A similar pattern is also observed for both rural and urban men.

Across the provinces, Malaita has the highest (13%) proportion of unmet needs for family planning followed by Guadalcanal (12%), Western (9%) and Honiara (8%), while other provinces collectively account for 11%. Other than Honiara and Western Province, Malaita followed by Guadalcanal and then other provinces has the highest unmet need for birth spacing while the proportion for birth limiting is highest in Honiara and Western Province. This result indicates that birth spacing is mostly preferred by women in Malaita, Guadalcanal and other provinces, whereas birth limiting is mostly preferred by women in Guadalcanal and Honiara. Looking at the met need for family planning, Western Province had the highest proportion (40%), followed by Malaita and Guadalcanal (each about 29%) and Honiara 24%. Other provinces collectively account for 42%. Comparing the proportions of met need for family planning either for birth spacing or birth limiting, the proportion of met needs is higher for birth limiting than for birth spacing across the provinces. This result clearly indicates that family planning is used much more for birth limiting than for birth spacing, and the proportion is highest in Western (28%) followed by Malaita (19%), Guadalcanal 17% and Honiara 15%.

The proportion of unmet needs for family planning is highest in women with no education at all, with the proportion decreasing as the educational attainment of women increases. The proportion of unmet needs is also higher for birth spacing than for birth limiting. A similar pattern is also observed for met needs; however, the proportion of met needs is higher for birth limiting than for birth spacing for all levels of educational background. This result clearly illustrates that regardless of educational background, women are more likely to use any form of contraceptive method for birth limiting than for birth spacing. This is further supported by the small proportion of unmet needs for family planning for birth spacing than for birth limiting. It is evident that there is a high demand for family planning services and the demand is more obvious for birth limiting than for birth spacing.

Table 7.3.1 shows that the proportion of unmet needs for family planning was higher in the middle and lower wealth quintiles as opposed to the upper wealth quintiles. Additionally, the proportion of unmet needs was higher for birth spacing than for birth limiting. As for met needs for family planning, the proportion is highest in the middle to upper wealth quintiles. The table also reveals that regardless of the wealth quintile, the proportion of met needs is higher for birth limiting than for birth spacing. This result strongly indicates that most married women in Solomon Islands use a contraceptive method for birth limiting rather than for birth spacing.

Table 7.3.1: Need and demand for family planning among currently married women

Percentage of currently married women age 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, Solomon Islands 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	11.7	3.2	15.0	19.0	0.4	19.5	30.8	3.7	34.4	56.6	86
20-24	10.5	4.2	14.8	19.5	5.5	25.0	30.0	9.7	39.7	62.9	383
25-29	11.3	4.0	15.3	17.2	8.6	25.8	28.5	12.6	41.0	62.8	588
30-34	7.8	7.3	15.1	10.7	26.4	37.0	18.5	33.7	52.1	71.0	533
35-39	3.9	4.6	8.5	6.6	37.8	44.4	10.5	42.4	52.8	84.0	433
40-44	0.6	1.6	2.3	3.1	36.9	40.0	3.8	38.6	42.3	94.6	311
45-49	0.0	0.7	0.7	2.1	45.0	47.1	2.1	45.7	47.8	98.5	226
Residence											
Urban	3.0	5.2	8.2	11.4	17.9	29.3	14.5	23.1	37.5	78.1	372
Rural	7.6	4.0	11.6	11.4	24.1	35.4	19.0	28.1	47.1	75.3	2,187
Region											
Honiara	3.3	4.8	8.1	8.7	14.8	23.6	12.0	19.7	31.7	74.4	278
Guadalcanal	6.8	5.8	12.6	12.4	17.0	29.5	19.2	22.9	42.1	70.0	445
Malaita	9.1	4.3	13.4	10.5	18.9	29.4	19.6	23.2	42.8	68.7	612
Western	4.0	4.5	8.5	12.8	27.5	40.4	16.8	32.0	48.8	82.7	303
Other provinces	7.6	3.1	10.7	11.8	30.0	41.9	19.4	33.1	52.6	79.6	922
Education											
No education	7.0	5.1	12.1	6.5	23.1	29.6	13.5	28.1	41.6	71.0	385
Primary	7.5	4.1	11.6	10.8	25.3	36.1	18.4	29.4	47.7	75.7	1,610
Secondary	5.5	4.5	10.1	15.6	16.2	31.7	21.1	20.7	41.8	75.9	493
More than secondary	2.5	0.5	3.0	21.8	24.1	45.9	24.3	24.6	48.9	93.8	72
Wealth quintile											
Lowest	9.3	5.2	14.5	8.5	25.4	33.9	17.8	30.6	48.4	70.0	499
Second	7.8	2.7	10.4	7.2	25.0	32.2	14.9	27.7	42.6	75.6	500
Middle	10.9	4.5	15.4	11.7	24.7	36.4	22.6	29.3	51.9	70.3	490
Fourth	4.5	5.3	9.8	16.4	21.0	37.4	20.9	26.4	47.3	79.2	546
Highest	2.7	3.2	6.0	12.7	20.0	32.7	15.4	23.2	38.6	84.6	524
Total women currently married	6.9	4.2	11.1	11.4	23.2	34.6	18.3	27.4	45.7	75.6	2,560
Total women not currently married	0.0	0.7	0.7	5.4	3.9	9.4	5.4	4.7	10.1	92.8	1,263
Total all women	4.6	3.1	7.7	9.4	16.8	26.2	14.1	19.9	33.9	77.3	3,823

[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 2 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

7.4   IDEAL NUMBER OF CHILDREN

The 2006/2007 SIDHS asked women and men about the total number of children they would like to have in their lifetime. For respondents who already had living children, the question was posed hypothetically: *'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?'* Table 7.4 presents the distribution of women and men aged 15–49 by their preferred number of children.

Generally, the average ideal number of children expressed by currently married men and women aged 15–49 is 3.8 for men and 3.7 for women, and the mean ideal number increases with the number of living children. As also shown, 34% of currently married women preferred 4 as an ideal number of children. Equally so, 35% of currently married men expressed 4 as an ideal number of children.

Table 7.4: Ideal number of children

Percent distribution of women and men 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, Solomon Islands 2007

	Number of living children							
Ideal number of children	0	1	2	3	4	5	6+	Total
WOMEN[1]								
0	12.1	7.3	1.7	1.6	2.4	4.5	3.4	6.1
1	3.2	9.2	0.9	1.0	0.3	0.9	0.4	2.5
2	34.0	32.2	30.0	9.1	5.4	3.4	3.5	20.5
3	13.6	18.5	17.1	26.8	8.6	5.5	4.1	13.7
4	24.3	20.5	40.0	47.7	57.1	28.7	34.4	34.0
5	3.2	3.1	2.4	4.0	5.8	31.4	9.2	6.7
6+	2.1	1.9	1.6	2.2	12.2	10.9	26.8	7.0
Non-numeric responses	7.5	7.4	6.3	7.7	8.3	14.7	18.0	9.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,170	494	447	450	462	330	470	3,823
Mean ideal number children for:[2]								
All	2.6	2.6	3.2	3.5	4.0	4.3	4.6	3.3
Number	1,082	458	419	415	424	282	385	3,464
Currently married	3.0	2.8	3.2	3.5	4.0	4.3	4.6	3.7
Number	208	304	376	392	402	271	359	2,312
MEN[3]								
0	11.8	2.7	1.7	4.6	1.5	9.6	1.6	7.3
1	1.4	5.9	0.6	0.0	1.6	0.0	0.0	1.4
2	21.2	21.8	16.4	6.0	1.2	0.2	0.0	14.1
3	19.0	23.4	22.0	31.4	5.2	6.8	3.4	17.4
4	30.8	35.5	43.9	39.6	51.5	30.2	21.8	34.6
5	9.0	3.4	6.1	10.3	19.1	28.9	11.3	10.9
6+	1.8	1.5	2.3	1.1	16.2	17.6	40.4	7.4
Non-numeric responses	5.0	5.8	6.9	7.1	3.8	6.9	21.6	6.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	740	148	167	155	151	118	134	1,614
Mean ideal number children for men 15-49:[2]								
All	3.0	3.1	3.4	3.5	4.4	4.3	5.4	3.5
Number	703	140	156	144	145	110	105	1,503
Currently married	3.2	3.0	3.4	3.5	4.4	4.2	5.4	3.8
Number	93	120	151	144	142	108	103	863

Table 7.4 (continued)

Ideal number of children	Number of living children							Total
	0	1	2	3	4	5	6+	
Mean ideal number children for men 15+ :[2]								
All	3.0	3.1	3.5	3.6	4.6	4.3	5.1	3.7
Number	706.8	142.3	180.1	169.4	194.3	161.8	259.2	1,866.1
Currently married	3.2	3.0	3.5	3.6	4.6	4.2	5.1	4.0
Number	97.6	122.8	175.8	169.4	191.2	159.5	257.8	1,174.2

[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).

7.5   MEAN IDEAL NUMBER OF CHILDREN

The mean ideal number of children among women aged 15–49 by background characteristics is presented in Table 7.5. As shown, the average ideal number of children increases steadily with women's age such that the mean ideal number of children expressed by married women aged 15–19 was 2.4, while it was 4.3 for women aged 45–49. The table also displayed little difference in the mean ideal number of children expressed by urban and rural women. As well, there were no substantial variations in the mean ideal number of children as expressed by currently married women across the provinces.

Table 7.5: Mean ideal number of children

Mean ideal number of children for all women age 15-49 by background characteristics, Solomon Islands 2007

Background characteristic	Mean	Number of women[1]
Age		
15-19	2.4	629
20-24	2.8	680
25-29	3.3	668
30-34	3.7	554
35-39	3.8	428
40-44	4.0	293
45-49	4.3	212
Residence		
Urban	3.0	606
Rural	3.4	2,858
Region		
Honiara	3.0	456
Guadalcanal	3.4	594
Malaita	3.5	709
Western	3.1	427
Other provinces	3.3	1,278
Education		
No education	3.5	452
Primary	3.5	1,885
Secondary	2.8	1,008
More than secondary	3.2	118
Wealth quintile		
Lowest	3.6	610
Second	3.3	689
Middle	3.3	668
Fourth	3.3	693
Highest	3.0	804
Total	3.3	3,464

[1] Number of women who gave a numeric response

Considering respondents' educational levels, there is very little variation noted; however, the mean ideal number of children declines with increasing education. Women with no education or only a primary education prefer 3.5 children, while those with a secondary and or higher education level preferred 2.8 and 3.2 children, respectively.

A similar trend was also noted for wealth quintile; that is, the mean ideal number of children declines as the wealth quintile increases. For instance, 3.6 is the mean ideal number of children for women in the lowest wealth quintile compared with 3.0 children for women in the highest quintile.

7.6   FERTILITY PLANNING

To measure the level of unwanted fertility during the 2006/2007 SIDHS, women were asked whether any birth in the preceding five years was wanted at the time, wanted but at a later time, or not wanted at all. 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 the respondents to recall accurately their wishes at one or more points in the last five years. Care must be taken when interpreting these results because an unwanted conception may have become a cherished child, leading to the rationalisation of responses to these questions.

According to Table 7.6, 42% of births in the five years preceding the survey were wanted then, 32% were wanted later (mistimed), and 25% were not wanted at the time they were conceived. This finding clearly indicates that there is a great demand for birth spacing and limiting, which is roughly consistent with the number of unmet need 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, the data show that little variation was noted in the proportion of births that were wanted then by birth order and age of mother at births. However, the proportion of wanted birth is highest in birth order 1, with the proportion decreasing as birth order increases. For instance, 50% of all first births (birth order 1) were wanted then, while 37% of all fourth or more births (birth order 4+) were wanted then. This result clearly indicates that wanted births diminishes with increased number of births, thus there is a clear need for birth spacing and limiting. As also shown, proportion of mistimed births was highest in birth order 2 followed by birth order 3, and the lowest proportion was demonstrated in birth order 1. About 34% of all fourth and or more births were not wanted.

Table 7.6 also shows that more than 40% of all births delivered by younger mothers (aged less than 35) were wanted then. However, as the mother gets older (35 years or more) the pattern changes; that is, the proportion of births is highest in unwanted births. Again, this result reveals the need for birth spacing — although more importantly birth limiting — in older women rather than in younger women.

Table 7.6: Fertility planning status

Percent distribution of births to women 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, Solomon Islands 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	49.6	27.3	22.2	0.8	100.0	620
2	43.9	39.6	15.2	1.3	100.0	582
3	42.6	36.0	20.3	1.1	100.0	509
4+	37.0	28.4	33.9	0.7	100.0	1,185
Mother's age at birth						
<20	45.0	33.1	20.6	1.3	100.0	265
20-24	42.1	34.8	22.4	0.7	100.0	846
25-29	44.6	34.6	19.7	1.1	100.0	850
30-34	39.8	27.3	32.1	0.8	100.0	605
35-39	33.8	27.3	38.2	0.7	100.0	235
40-44	48.4	15.8	35.9	0.0	100.0	84
45-49	*	*	*	*	100.0	12
Total	42.1	31.8	25.3	0.9	100.0	2,896

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

7.7   WANTED FERTILITY RATES

The wanted fertility rate measures the potential demographic impact of avoiding unwanted births. It 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 respondent. The gap between wanted and actual fertility shows how successful women were in achieving their reproductive intentions.

A comparison of the total wanted fertility rate and total fertility rate for the three years preceding the survey by background characteristics is presented in Table 7.7. The data reveal that if all unwanted births are eliminated, the total fertility rate in Solomon Islands would be 3.3 children per woman instead of the actual total fertility rate of 4.6 children per woman.

Table 7.7: Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Solomon Islands 2007

Background characteristic	Total wanted fertility rates	Total fertility rate
Residence		
Urban	2.8	3.4
Rural	3.4	4.8
Region		
Honiara	2.8	3.4
Guadalcanal	(3.8)	(5.1)
Malaita	(3.8)	(5.5)
Western	*	*
Other provinces	3.1	4.2
Education		
No education	*	*
Primary	3.7	4.9
Secondary	2.9	3.8
More than secondary	*	*
Wealth quintile		
Lowest	(4.5)	(5.9)
Second	(3.3)	(5.1)
Middle	(3.1)	(4.2)
Fourth	3.2	4.0
Highest	2.7	3.6
Total	3.3	4.6

Note: Rates are calculated based on births to women age 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.
Figures in parentheses are based on 500-750 unweighted cases. Asterisks indicate a figure based on fewer than 500 unweighted cases and have been suppressed.

Considerable variation is observed in the actual and wanted fertility rate by background characteristics. The overall gap between actual and wanted fertility ranges is 1.3 and the gap between actual and wanted fertility by background characteristics ranges from 0.6 to 1.4. The lowest gap of 0.6 was found in urban women as well as women in Honiara, followed by 0.9 in women with educational attainment of a secondary level and over. The biggest gap (1.4) on the other hand, was found in rural women. The results clearly indicate that urban women, including women in Honiara are more likely to succeed in achieving their reproductive intentions as opposed to women living in rural areas. Equally so, women with a higher educational attainment are also more likely to achieve the same as compared with women with a primary or no educational background at all.

7.8   KEY RESULTS

Unmet needs for contraception can lead to unintended pregnancies, which pose risks for both mother and child, and contributes to a high fertility level. Understanding the level or extent of unmet needs for contraception and the background of women with unmet needs for family planning methods can help strengthen health services and family planning programmes in targeting sub-groups of the population who are in need of such services. Woman's fertility preferences and desire for having the number of children they want are likely to be archived if the required family planning services are available, affordable and accessible. This section summarises the main findings that allow for an assessment of the need for contraception.

1. The desire for more children for both currently married women and men diminishes as the number of living children increases.

2. A higher proportion of those desiring to limit childbearing is higher among rural dwellers than urban dwellers. This is an indication that rural dwellers do not meet their desire to limit childbearing.

3. Women with a low educational background are less likely to meet their desire to limit childbearing, and therefore unwanted pregnancies occur.

4. Women in Western, Guadalcanal and Malaita provinces are less likely to meet their desire to limit their family size than women in Honiara.

5. The proportion of women who wish to limit their childbearing is higher in the lower wealth quintiles meaning that these women are less likely to meet their desire in limiting their childbearing.

6. The mean ideal number of children for all women aged 15–49 in Solomon Islands is reported to be 3.3 children. The mean ideal number of children increases with women's age.

7. About 32% of births in the five years preceding the survey were mistimed, while one in every four births were unwanted births. This indicates that there is a great demand for contraception for birth spacing and birth limiting.

8. The results show the gap of 1.3 births between wanted fertility and the actual fertility rates. This implies that if all women are able to achieve their reproductive intentions, then the total fertility rate in Solomon Islands would be 3.3 children instead of the actual fertility rate of 4.6 children per woman.

9. Unmet needs for family planning is 11%, which indicates the proportion of women who want no more children (limiters) or want to wait for two or more years before having another child but are not using any method of contraception.

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 Solomon Islands. The information presented in this chapter is important not only for a demographic assessment of the country's population, but also in the design and evaluation of health policies and programmes. According to the latest Solomon Islands Government health objectives and outcomes document, primary and preventative health services are key areas for improving the quality of life of Solomon Islanders, which includes the reduction of infant and childhood mortality and the incidence of high-risk pregnancies. Estimates of infant and child mortality serve as an input into population projections, particularly if the level of adult mortality is known from another source or can be inferred with reasonable confidence. These estimates also serve the needs of the health ministry by identifying populations within the country, 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 2006/2007 SIDHS 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 have died, the respondent was asked to provide the child's age at death.

A retrospective birth history, such as that included in the 2006/2007 SIDHS 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 have 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 (e.g. 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 (IMR) 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 children's birth dates

Mis-stating the date of birth and age at death of a child results in a distortion of the age pattern of death. 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. 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, although the table also shows that date of birth of over 9 out of 10 babies born were recorded.

8.1.2 Reporting 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 ages are misreported then they will bias estimates, especially if the net effect of age misreporting results in the transfer of deaths from one age bracket to another. For example, a net transfer of deaths from under age 1 year 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 2006/2007 SIDHS 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 7 days, 14 days, and 21 days — which are usually observed in other DHSs — are not a concern in the SIDHS results. Although age heaping at 14 days and 21 days may not bias any indicator, the heaping at 7 days usually leads to lower estimates of early neonatal mortality and perinatal mortality, but because this is not the case in Solomon Islands, the results can be used as indicators for policy and/or planning purposes. However, it must be stressed that caution must be exercised in using the mortality measures as indicators of levels of early age mortality because of possible under coverage of eligible DHS respondents. This is particularly important as the DHS based mortality indicators appear to be much lower than the estimates based on 1999 Population and Housing Census Data, considering the socioeconomic environment during the period 1999–2007.

Appendix Table C.6 presents the distribution of deaths of children aged less than 2 years by age at death in months over a 20-year period that is split into groups of 5 years. Neonatal deaths in the past 20 years constitute 63% of all infant deaths, and this is considered to be quite high. There is wide variation in the rates within a range (39–89%) over the 20 years prior to the survey, indicating possible misreporting or under-reporting. Similar to Table C.5, Table C.6 shows evidence of some heaping at age 12 months, which might have had an impact on estimates of infant mortality.

Finally, some caution should also be exercised when comparing early childhood mortality results from the 2006/2007 SIDHS to estimates from other data sources that have been calculated using a different technique. In Solomon Islands, childhood mortality rates have typically been computed using two approaches: direct and indirect. Direct mortality estimates have been computed from 2006/2007 SIDHS data using information collected using the birth history table. On the other hand, lacking the necessary information for producing estimates using direct methods, the population censuses give indirect estimates based on the number of children ever born and children surviving to women aged 15–49. The underlying assumptions used in indirect methods can introduce a potential bias (see 1999 census report for the defined assumptions) in the mortality estimates.

8.1.3　Sampling errors for child and infant mortality estimates

All estimates produced from the SIDHS are affected by two types of errors: non-sampling and sampling. While this issue is addressed in detail in Appendix B, it is worth mentioning sampling errors 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 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 8.1.1: Five-year mortality rates in Solomon Islands (refers to zero to four years before the SIDHS, reflecting roughly 2003–2007)

Indicator	Estimate /1,000 births	Std error	95% CI Lower	95% CI Upper	RSE (%)
Neonatal mortality	15.2	3.7	7.7	22.6	24.5
Postneonatal mortality	9.1	2.8	3.5	14.7	30.6
Infant mortality	24.3	4.9	14.4	34.2	20.3
Child mortality	13.0	3.7	5.6	20.4	28.5
Under-5 mortality	37.0	6.0	25.0	49.0	16.3

Table 8.1.2: Ten-year mortality rates in Solomon Islands (refers to zero to nine years before the SIDHS, reflecting roughly 1998–2007)

Indicator	Estimate /1,000 births	Std. error	95% CI Lower	95% CI Upper	RSE (%)
Neonatal mortality	16.8	2.7	11.4	22.3	16.1
Postneonatal mortality	9.3	2.3	4.6	13.9	25.3
Infant mortality	26.1	3.9	18.2	34.0	15.0
Child mortality	11.4	2.2	6.9	15.9	19.7
Under-5 mortality	37.2	4.1	29.0	45.5	11.1

To help understand the reliability of the estimates in the second column, any one of the standard error (std. error), 95% confidence interval (95% CI) or relative standard error (RSE [%]) can be used, although the last two options can 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 simply 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% are considered usable, but should be used with care, while estimates with RSEs above 25%, should not be considered reliable. Given nearly all the estimates above have RSEs falling between 15% and 30%, it strongly suggested that estimates provided in this chapter should be used with great care.

8.2　EARLY CHILDHOOD MORTALITY RATES: LEVELS AND TRENDS

The 2006/2007 SIDHS collected birth histories from roughly 3,823 women. Early childhood mortality rates for the 15-year period preceding the survey are presented below by 5-year periods in Table 8.2.

Table 8.2: Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates for five-year periods preceding the survey, Solomon Islands 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)	15	9	24	13	37
5–9 (1998–2003)	17	9	26	11	37
10–14 (1993–1998)	9	13	23	8	30

[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 is 24 deaths per 1,000 live births. This means that 24 in every 1,000 babies born in Solomon Islands do not live to their first birthday. Of those who survive to the first birthday, 13 out of 1,000 would die before reaching their fifth birthday. The overall under-5 mortality rate is 37 deaths per 1,000 live births, which implies that 37 in every 1,000 Solomon Islands 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 15 deaths per 1,000 live births, implying that 15 out of every 1,000 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 Solomon Islands, postneonatal mortality is 9 per 1,000 births among infants.

The mortality estimates presented in Table 8.1 for the period 1998–2003 increased from low levels observed for period 1993–1998. For example, a high level increase is observed in neonatal deaths between 1993 and1998 and between 1998 and 2003, from 9 deaths per 1,000 live births to 17 deaths per 1,000. This is nearly twice the number of deaths, and is the mainly reason for the increase in infant mortality in Solomon Islands babies during the same period.

> Early age mortality estimates derived from the 1999 census data indicate an infant mortality rate of 66 deaths per 1,000 births for Solomon Islands. The 2006/2007 SIDHS estimated the IMR to be 24 infant deaths per 1,000 for the most recent period (0–4 years before the DHS), indicating a massive 64% decline in the IMR level from the 1999 level. Whether this decline is a direct result of interventions to reduce early age mortality in Solomon Islands or is a result of data errors needs to be investigated further. It is important for users of the SIDHS data to know that early age mortality, including IMR estimates, are based on an 87% response rate of all eligible women selected in the DHS sample.

Data from the 2006/2007 SIDHS also show that the situation of childhood mortality in Solomon Islands perhaps worsened in the period 1998–2003, compared with the earlier period 1993–1998. This worsened situation is observed in neonatal, infant, childhood and under-5 mortality. For example, IMR increased from 23 infant deaths per 1,000 live births during the period 1993–1998 to 26 infant deaths per 1,000, while the rate for under-5 mortality increased from 30 to 37 deaths per 1,000 births (Fig. 8.1).

Figure 8.1: Mortality trends
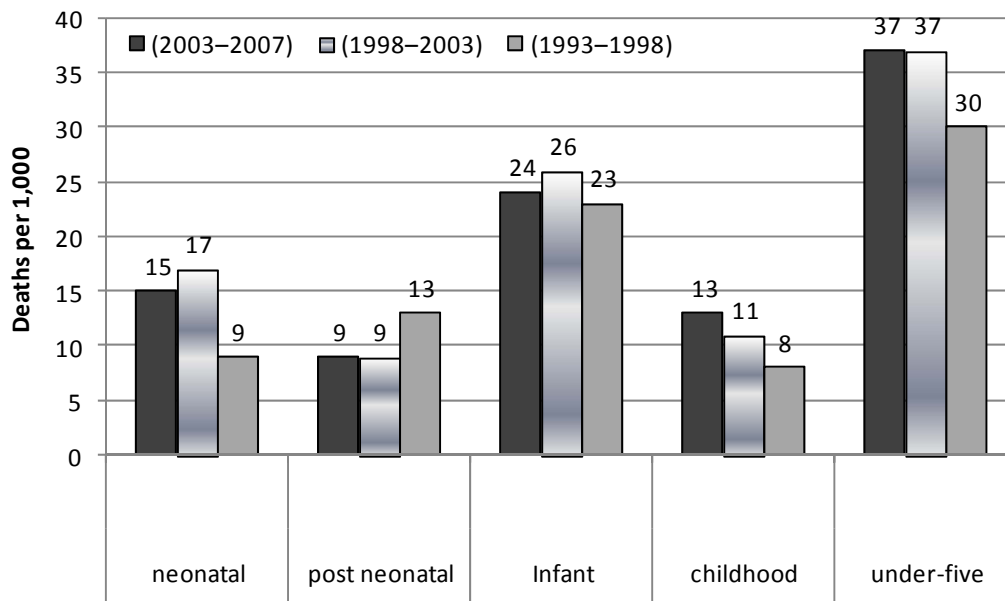
8.3 EARLY CHILDHOOD MORTALITY BY SOCIOECONOMIC CHARACTERISTICS

Table 8.3 presents early childhood mortality rates in Solomon Islands by socioeconomic characteristics. The rates refer to the 10-year period from 1998–2007. As evidenced from sources such as censuses, there are differences between mortality levels in urban populations and mortality levels in rural populations. For example, the IMR in rural Solomon Islands during the 10-year period before the 2006/2007 DHS is 27 deaths per 1,000 births compared with 23 deaths per 1,000 births in urban areas. This rural IMR of 27 is above the national average of 24 deaths per 1,000 births. In terms of differentials by province, Malaita Province has estimates that are consistently higher than those for other provinces. Interestingly, the average mortality levels estimated for all 'other provinces' combined follows closely behind Malaita compared with other provinces (Fig 8.2).

A mother's education level is typically associated with child survival. In general, children born to mothers with a secondary or higher education have by far the lowest rates for all types of childhood mortality while the opposite is true for mothers with low levels of education. Table 8.3 generally confirms that as the level of a mother's education increases, the level of early age mortality decreases. There are, however, indications that this view is not true and could be due to data error (e.g. in the analysis of IMR). For instance, the estimated IMR for mothers with no education is 32, while it is 25 for mothers with a primary education, and increasing to 28 for mothers who have completed a secondary level education. A similar pattern is observed for postneonatal mortality. Similarly, the childhood mortality rate is higher for mothers with a primary level education than for mothers with no education.

Table 8.3: Early childhood mortality rates by socioeconomic characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by background characteristic, Solomon Islands 2007

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN) [1]	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
Residence					
Urban	15	8	23	8	31
Rural	17	9	27	12	38
Region					
Honiara	11	10	21	11	32
Guadalcanal	13	9	21	7	28
Malaita	17	14	30	17	47
Western	(17)	(5)	(22)	(13)	(35)
Other provinces	20	8	28	10	37
Mother's education					
No education	17	15	32	11	42
Primary	18	7	25	13	38
Secondary	15	13	28	5	33
More than secondary	*	*	*	*	*
Wealth quintile					
Lowest	8	8	16	10	26
Second	31	5	37	13	49
Middle	8	13	21	21	41
Fourth	21	14	35	3	38
Highest	17	6	23	11	33

Note: Figures in parentheses are based on 250–499 unweighted cases. An asterisk indicates that a figure is based on fewer than 250 unweighted cases and has been suppressed.
[1] Computed as the difference between infant and neonatal mortality rates.

It is generally observed that women's wealth status is inversely associated with childhood mortality. However, this general guide is not observed in the case of Solomon Islands as seen in Table 8.3. Children in the lowest wealth quintile households have the lowest mortality rates, while those in the second to fourth wealthiest quintile households have the highest mortality rates. *As noted above, please use caution when interpreting these results due to under-coverage of respondents on which the rates are based.*

Figure 8.2: Mortality levels by province

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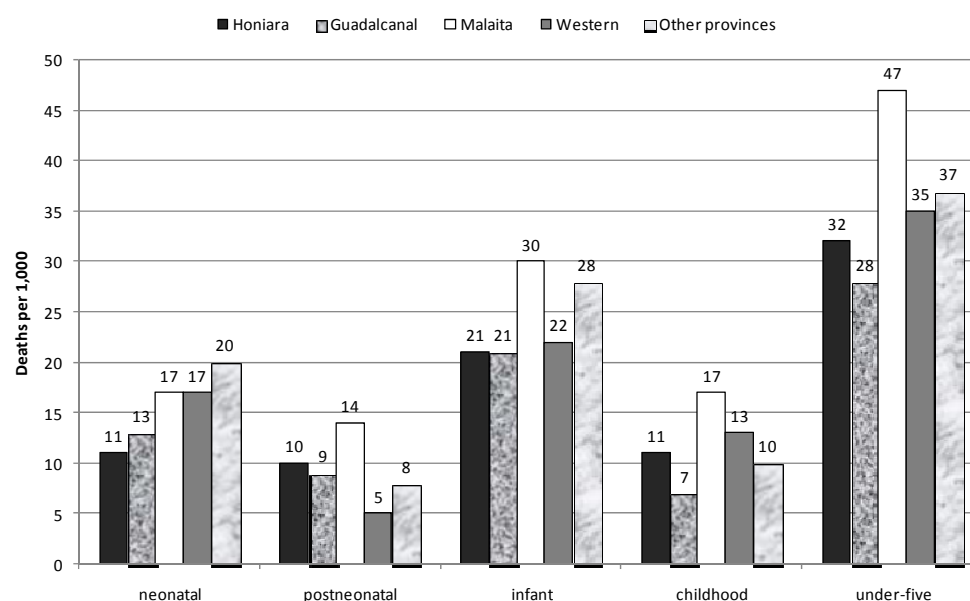
Similar to observations made in other DHSs and data from other sources, the mortality differentials observed by socioeconomic characteristics of the mother are greater for the neonatal period than for the postneonatal period. This is undoubtedly due to the fact that most causes of neonatal mortality are biologically related and are less amenable to socioeconomic interventions, whereas causes of postneonatal mortality are more related to standard of living factors. This means that efforts to reduce infant mortality in Solomon Islands will yield greater results if they are targeted at a mother's and household's behavioural factors. Thus, if the DHS data depict an accurate picture of the true level and trend of child mortality in Solomon Islands it then is safe to assume that besides education, the declining infant mortality could also be the result of government interventions that target issues related to a mother's and household's attitudes and practices.

However, evidence from the DHS standard error computation (see Appendix B on Estimates of sampling errors) shows that the childhood mortality decline is likely to be a result of data errors and therefore, users are urged to use caution when using the DHS derived indicators.

8.4 EARLY CHILDHOOD MORTALITY BY DEMOGRAPHIC CHARACTERISTICS

The demographic characteristics of both a mother and child have been found to play an important role in the survival probability of children. Table 8.4 presents early childhood mortality by a number of these characteristics, including the sex of the child, mother's age at birth, birth order, and previous birth interval for the 10-year period before the survey.

The IMR estimated from the 2006/2007 SIDHS for females is 14% higher than that for males (i.e.28 deaths per 1,000 for females and 24 deaths per 1,000 for males). This contradicts the otherwise commonly observed pattern in most countries of the world of higher male than female child mortality rates.

The results in Table 8.4 do not agree with the traditional hypothesis of 'too early and too late increases child's mortality.' According to the 2006/2007 SIDHS findings, children born 'too early' (i.e. mothers who are less than age 20) are not disadvantaged compared with children born to mothers between the ages of 20 and 39. Given that the sample was too small, the hypothesis that 'too late increases child's mortality' could not be tested, The traditional view that children born to mothers who are less than 20 years of age have a higher risk of dying before one month of age compared with children born to mothers who are older does not appear to hold in Solomon Islands. *Caution must be used in interpreting these mortality measures as they are based on 87 out of 100 eligible women selected (87% response rate for women).*

Table 8.4: Early childhood mortality rates by demographic characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by demographic characteristics, Solomon Islands 2007

Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN) [1]	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
Child's sex					
Male	18	6	24	13	36
Female	15	13	28	10	38
Mother's age at birth					
<20	13	6	18	5	23
20–29	15	9	24	13	37
30–39	23	13	36	9	45
40–49	*	*	*	*	*
Birth order					
1	23	5	28	4	32
2–3	12	10	21	18	39
4–6	18	14	32	8	40
7+	(19)	(0)	(19)	*	*

Table 8.4 (continued)

Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN) [1]	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
Previous birth interval[2]					
<2 years	11	18	29	16	44
2 years	7	11	19	20	38
3 years	21	3	24	(10)	(34)
4+ years	25	6	31	6	37
Birth size[3]					
Small/very small	(30)	(2)	(32)	-	-
Average or larger	5	5	10	-	-
DK/Missing	*	*	*	-	-

Note: Figures in parentheses are based on 250–499 unweighted cases. An asterisk indicates that a figure is based on fewer than 250 unweighted cases and has been suppressed.
[1] Computed as the difference between the infant and neonatal mortality rates.
[2] Excludes first-order births.
[3] Rates for the five-year period before the survey.

Birth order affects a child's chances of survival mostly during infancy, and for Solomon Islands the first birth is particularly at greater risk of mortality compared with higher order births. For example, in the case of neonatal mortality, the risk for a first order birth is 92% higher than the risk for birth orders 2–3. For those children surviving the neonatal period, the infant mortality rate increases for higher birth orders. In the case of under-5 mortality, there is little difference in mortality risks between second to sixth order births (39–40 deaths per 1,000) of dying before age 5 years. In Table 8.4, an asterisk in the column means these figures are based on fewer than 250 unweighted cases. The values for neonatal, postneonatal, and infant mortality for seventh and higher birth orders is in brackets because they are based on only 250–499 unweighted case, and should therefore be interpreted with caution.

The data in Table 8.4 also show that short birth intervals are associated with increased risk of mortality. For neonatal mortality, the shortest birth interval (i.e. less than two years) carries a high risk of mortality and the risk of mortality is generally observed to be high with each increase in the length of the birth interval. Again, this does not agree with the traditional view of decline in mortality risk for longer birth intervals. For infant and under-5 mortality, there appears to be little difference but this could be due to the very small sample size.

8.5   EARLY CHILDHOOD MORTALITY BY STATUS OF WOMEN

This section presents information on indicators of women's empowerment, presents three empowerment indices, and relates those indices to early childhood mortality outcomes. The Women's Questionnaire collected data on general background characteristics of female respondents (e.g. age, education, wealth quintile, employment status) and also data more specific to women's empowerment (e.g. household decision making and reasons for which wife-beating is justified). This section tabulates and presents early childhood mortality rates classified by two indicators of woman's empowerment: a woman's participation in household decision making, and her attitudes toward wife beating. That is, these measures of empowerment were developed based on the number of household decisions in which the respondent participates, and her opinion on the number of reasons that justify wife beating. These measures were used to cross-tabulate early childhood mortality indicators to determine the relationship between women's empowerment and childhood mortality outcomes as presented in Table 8.5.

Table 8.5: Early childhood mortality rates by women's status

Infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by indicators of women's status, Solomon Islands 2007

Empowerment indicator	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
Number of decisions in which women participate[1]			
0	(50)	*	*
1–2	38	(12)	(49)
3–4	20	11	30
Number of reasons given for refusing to have sexual intercourse with husband[2]			
0	*	*	*
1–2	18	9	27
3	27	12	38
Number of reasons for which wife-beating is justified[3]			
0	29	18	47
1–2	16	6	23
3–4	26	8	34
5	(31)	(9)	(40)

Note: Figures in parentheses are based on 250–499 unweighted cases. An asterisk indicates that a figure is based on fewer than 250 unweighted cases and has been suppressed.
[1] Restricted to currently married women. See Table 14.5 for the list of decisions.
[2] See Table 14.7 for the list of reasons.
[3] See Table 14.9 for the list of reasons.

With regards to participating in the decision-making process in the household, there is some correlation between a woman's empowerment and early childhood mortality. For example, Table 8.5 shows that the probability of babies dying before reaching their first birthday is high among babies born to mothers who have participate very little in decision making compared with babies born to mothers who participate in three to four decision-making opportunities. Whether the high levels of IMR observed are correlated to non-participation in decision making is uncertain.

The 2006/2007 SIDHS also gathered information on women's attitudes toward wife beating, a proxy for women's perception of their status. Women who believe that a husband is justified in hitting or beating his wife for any of the specified reason may believe themselves to be low in status, both absolutely and relative to men. Such a perception could act as a barrier to accessing health care for themselves and their children, affect their attitude toward contraceptive use, and impact their general well-being. Women were asked whether a husband is justified in beating his wife under a series of circumstances, including: if the wife burns the food, argues with him, goes out without telling him, neglects the children, and refuses sexual relations, among others. Cross-tabulation of early childhood mortality by this empowerment indicator (Table 8.5) shows no clear pattern, although the probability of babies dying before reaching their first birthday is high among babies born to mothers who provided zero or three or more reasons for husbands beating their wives compared with those born to mothers who provided one to two reasons for wife beating. This may suggest that there is very little or no correlation between wife beating and infant mortality.

8.6 PERINATAL MORTALITY

In the 2006/2007 SIDHS, women were asked to report all pregnancy losses in the five years before the survey. The duration of each such pregnancy was recorded. In this report, perinatal deaths include pregnancy losses occurring after seven completed months of gestation (stillbirths) and deaths to live births within the first seven days of life (early neonatal deaths). The distinction between a stillbirth and an early neonatal death may be a fine one, depending often on the observed presence or absence of some faint signs of life after birth. Causes of stillbirths and early neonatal deaths are overlapping, and examining just one or the other can understate the true level

of mortality around the time of delivery. For this reason, in this report, both event types are combined and examined together.

The perinatal mortality rate is the sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months' duration. The perinatal mortality rate is a useful indicator of the state of delivery services, both in terms of their use and their quality (i.e. the degree to which complications arising during childbirth and the immediate postpartum are prevented or managed effectively). Data in Table 8.6 show that overall, the survey recorded 38 perinatal deaths, of which 4 were stillbirths and 34 were early neonatal deaths, resulting in a perinatal mortality rate in Solomon Islands of 14 per 1,000 pregnancies.

Perinatal mortality is highest among women in the youngest age group, decreasing in the next age group and increasing as the age of mothers increases. Table 8.6 further demonstrates that the duration of the previous pregnancy interval is related to pregnancy outcome. Pregnancies occurring within 39 months of a previous birth and first pregnancies have the highest risk of pregnancy loss or early death (17 and 26 pregnancy losses or early deaths per 1,000 pregnancies, respectively). Contrary to best practice recommendations, a birth interval of 39 months and more does not appear to be the safest pregnancy interval, therefore, caution must be taken in interpreting DHS results.

The perinatal mortality rate in rural areas is low compared with urban areas (14 pregnancy losses or early deaths per 1,000, compared with 16 per 1,000 in urban areas). In other words, the risk of pregnancy loss in rural areas is 13% lower than the risk in urban areas. In terms of differential by provinces, Malaita and Western provinces had equally more early deaths per 1,000 births than the other provinces.

Table 8.6: Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the five-year period preceding the survey, by background characteristics, Solomon Islands 2007

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate[3]	Number of pregnancies of 7+ months duration
Mother's age at birth				
<20	0	5	21	253
20–29	2	17	12	1,567
30–39	2	10	16	757
40–49	0	1	18	95
Previous pregnancy interval in months[4]				
First pregnancy	2	13	26	572
<15	0	0	0	95
15–26	1	6	10	683
27–38	1	4	8	583
39+	1	11	17	739
Residence				
Urban	1	4	16	331
Rural	3	30	14	2,341
Region				
Honiara	1	2	13	250
Guadalcanal	0	3	6	483
Malaita	2	14	22	679
Western	0	6	22	289
Other provinces	1	10	12	970

Table 8.6 (continued)

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate[3]	Number of pregnancies of 7+ months duration
Mother's education				
No education	1	6	18	373
Primary	2	23	15	1,664
Secondary	2	5	11	573
More than secondary	0	0	7	62
Wealth quintile				
Lowest	0	5	8	647
Second	2	10	22	554
Middle	0	2	5	484
Fourth	1	13	26	514
Highest	1	5	11	473
Total	4	34	14	2,672

[1] Stillbirths are foetal deaths in pregnancies lasting seven or more months.
[2] Early neonatal deaths are deaths at age 0–6 days among live-born children.
[3] The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months' duration, expressed per 1,000.
[4] Categories correspond to birth intervals of <24 months, 24–35 months, 36–47 months, and 48+ months.

Table 8.6 indicates that in Solomon Islands, a mother's education level determines the level of perinatal mortality as the differences of the perinatal mortality rate by level of education are big but do not show a consistent trend by level of education, for example, the rate for mothers with no education is higher (18 losses or early deaths per 1,000) than for those with more than secondary education (7 pregnancy losses or early deaths per 1,000). Similarly, there is no clear relationship between the wealth quintiles and the level of perinatal mortality, except that perinatal mortality is highest among the fourth and second quintile households.

8.7   HIGH-RISK FERTILITY BEHAVIOUR

The 2006/2007 SIDHS examined the relative importance of maternal fertility patterns associated with the 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 analysing the effects of high-risk fertility behaviour on child survival, a mother is classified as too young if she is less than 18 years, and too old if she is over 34 years at the time she gives 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 previously gave birth to three or more children (i.e. if the child is of birth order 4 or higher).

Table 8.7 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 children dying 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 27% of births in Solomon Islands are not in any high-risk category. An additional 19% of births are first order births to mothers aged 18–34 (considered an unavoidable risk category). The remaining 55% of births are in at least one of the specified avoidable high-risk categories. Over one-third of births (37%) are in only one of the high-risk categories — mostly high birth orders greater than 3 (24%) and short birth intervals less than 24 months (9%) — while 18% are in multiple high-risk categories. Births in multiple high-risk categories are mostly found in two combinations: age more than 34 years and birth order higher than 3; and birth order higher than 3 with a birth interval less than 24 months (7% of births).

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The second column of Table 8.7 shows that the risk of dying for a child who falls within an avoidable high-risk category is 1.09 times higher than that for a child who is not within a high-risk category. Children in a single high-risk category had a slightly higher (1%) mortality risk, while the mortality risk for children in multiple high-risk categories is almost 26% higher than the risk for children not in any high-risk category.

The single high-risk category associated with the highest risk ratio is a birth interval less than 24 months. Children born less than 24 months after a previous birth have a 90% higher risk of dying than children not in any high-risk category. It is important to note that the proportion of births that are first order births may be higher among women aged 34 and over than among younger women (because the level of fertility was high when these women had their first birth experience). The second highest risk is associated when a mother's age is greater than 34 (61% higher risk). While high birth order is generally considered a high-risk category, Table 8.7 shows that in Solomon Islands, children of birth order 3 or higher actually have a somewhat lower mortality risk (0.70) than children not in any high-risk category (1.00).

The category with the highest multiple risks is for births with the three risk factors combined; that is, children born to older women (aged 34 or older) with a short birth interval of less than 24 months, and of births order 3 and higher have a 81% higher risk of mortality than children not in any of these high-risk categories. However, this category involves only 3.3% of births. Among the multiple high-risk categories with the highest percentage of births, mothers who are aged 34 and over and higher birth orders increases the mortality risk by 11%.

Table 8.7: 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, Solomon Islands 2007

Risk category	Births in the five years preceding the survey		Percentage of currently married women[1]
	Percentage of births	Risk ratio	
Not in any high risk category	26.6	1.00	29.9a
Unavoidable risk category			
First order births between ages 18 and 34 years	18.5	1.03	7.5
Single high-risk category			
Mothers's age <18	3.3	0.55	0.3
Mothers's age >34	1.0	(1.61)	3.9
Birth interval <24 months	9.1	1.90	7.9
Birth order >3	23.6	0.70	13.8
Subtotal	36.9	1.01	26.0
Multiple high-risk category[2]			
Age <18 and birth interval <24 months	0.2	*	0.3
Age >34 and birth interval <24 months	0.0	*	0.2
Age >34 and birth order >3	9.3	1.11	23.2
Age >34 and birth interval <24 months and birth order >3	1.2	(1.81)	3.3
Birth interval <24 months and birth order >3	7.2	1.40	9.7
Subtotal	17.9	1.26	36.6
In any avoidable high-risk category	54.8	1.09	62.6
Total	100.0	na	100.0
Number of births/women	2,668	na	2,560

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

Table 8.7 also shows the potential for high-risk births among currently married women. A woman's current age, time elapsed since 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 the gestation period.

Three in ten (30%) currently married women in Solomon Islands are not in any high-risk category, while over half (63%) have the potential of giving birth to a child exposed to a higher-risk of mortality, with over one-third (37%) of married women falling into multiple high-risk categories.

8.8   KEY RESULTS

Evidence from the 2006/2007 SIDHS points to a much lower IMR (24) than the situation reported by the 1999 census (66). Even allowing for significant sampling errors — which are reflected in the high relative standard error and wide confidence interval (14.4–34.2) — and for non-sampling errors — such as the under-recording of infant deaths in the survey operation — we can say with some confidence that improvements in infant and child health have taken place since 1999.

What we cannot say for certain, is that the current IMR actually equals 24. We cannot ascertain the magnitude of this change, as years of civil unrest in the lead-up to the 1999 census caused an almost complete breakdown in government service provisions, including health, in many parts of Solomon Islands. All of this could have contributed to a much higher IMR in 1999 than one would have encountered under more peaceful circumstances. The 1999 Vanuatu IMR of 27/1,000 lends support to such reasoning. Vanuatu is a neighbouring Melanesian country facing similar challenges in health services provision as well as endemic malaria such as in Solomon Islands.

The 2006/2007 SIDHS examined the relative importance of maternal fertility patterns associated with the increased risk of mortality. Generally, infants and children have a greater probability of dying if they are 1) born to mothers who are too old or too young, 2) born after a short birth interval, or 3) are of high birth order.

In the analysis of the effects of high-risk fertility behaviour on child survival, a mother is classified as being too young if she is less than 18 years of age, and too old if she is over 34 years of age 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 4 or higher).

The 2006/2007 SIDHS findings show that:

- only 27% of births in Solomon Islands were not in any high-risk category;
- an additional 19% of births are first order births to mothers aged 18–34, which is considered an unavoidable risk category;
- the remaining 55% of births are in at least one of the specified avoidable high-risk categories:
    a. Over one-third of births (37%) are in only one of the high-risk categories; mostly birth order 3 or higher (24%), and for birth intervals less than 24 months (9%); while 18% are in multiple high-risk categories.
    b. Births in multiple high-risk categories are mostly found in two combinations: 1) age greater than 34 years and birth order higher than 3; and 2) birth order higher than 3 with birth intervals less than 24 months (7% of births).

Expected correlation	SIDHS confirms expected correlation (Yes/No/Partially)
Level of child mortality	
Early childhood mortality rates are higher for males than females	Yes
Early childhood mortality rates are higher in the rural than urban areas	Yes
Early childhood mortality rates decreases with increased level of education of mothers	Partially
Early childhood mortality rates decreases with increased level of wealth of women	No
Early childhood mortality rates is higher if mother is younger than age 20	No
Early childhood mortality rates is higher if mother is older than age 40	No
Early childhood mortality rates is higher at first birth	No
Early childhood mortality rates is higher if birth interval is less than 2 years	Partially
Early childhood mortality rates decreases with increased status of women	No
Perinatal mortality	
Perinatal mortality is higher among women in the youngest age group	Yes
Perinatal mortality is higher among women first pregnancy	Yes
Perinatal mortality is higher if pregnancy interval is within 39 months of previous birth	Partially
Perinatal mortality is higher in the rural than urban areas	Yes
Perinatal mortality is higher among women in the oldest age group	Partially
Perinatal mortality decreases with increased level of education of mothers	Yes
Perinatal mortality decreases with increased level of wealth of women	No

CHAPTER 9   REPRODUCTIVE HEALTH

Reproductive health is an important part of the healthcare system and is aimed at reducing pregnancy-related morbidity and mortality. The health care that a woman receives during pregnancy, at the time of delivery, and soon after delivery is important for the survival and well-being of both the mother and child. Solomon Islands is committed to the Millennium Development Goals (MDGs), and has developed various policies and strategies to this end. The MDGs call for a three-quarter reduction in maternal mortality, and for universal access to reproductive health services by 2015. This chapter presents findings on several aspects of maternal health for Solomon Islands: antenatal, delivery and postnatal care, as well as problems in accessing health care. The Ministry of Health and Medical Services is working toward better access and higher quality services to improve maternal health. The Ministry is trying to improve comprehensive and basic emergency obstetric care, facilitate human resource development, and upgrade the skills of skilled birth attendants.

Information on antenatal, delivery and postnatal care is of great value in identifying subgroups of women who do not use such services, and is useful in planning for improvements in service delivery. In this chapter, information on antenatal care (ANC) is shown according to the number of ANC visits made, the stage of pregnancy at the time of the first visit, the type of provider, and the specific services and information provided during ANC visits, including whether tetanus toxoid was received. Similarly, delivery services are described according to the place of the delivery, the type of person assisting the delivery, and the number of caesarean sections. Information on postnatal care is shown by whether a woman gave birth in a healthcare facility or elsewhere, and describes the time since delivery of the first postnatal care, and from whom it was received. This information helps identify population groups that are underserved by maternity care services, and highlights access and barriers to use of health services.

9.1   ANTENATAL CARE

The major objective of ANC is to identify and treat problems during pregnancy, such as anaemia and infections. It is during an ANC visit that screening for complications, and advice on a range of issues, including place of delivery and referral of mothers with complications occur. In the 2006/2007 SIDHS, interviewers recorded the source of ANC and the person who provided that care for a woman's most recent births. If a woman received ANC from more than one provider, the provider with the highest qualifications was recorded.

Table 9.1 shows the background characteristics of women who had live births in the five years preceding the survey according to the type of ANC provider. The results indicate that 95% of women received ANC from a skilled provider. Most of these women (72%) sought care from a nurse or midwife, and 2% received care from a doctor. Less than 1% of women received ANC from a traditional birth attendant as their most qualified provider. About 3% of women who gave birth in the five years preceding the survey received no ANC.

Data in Table 9.1 and Figure 9.1 further indicate that the choice of ANC provider varies slightly by the mother's age. Mothers aged 20–34 are more likely than younger mothers to receive ANC from a skilled provider, particularly a nurse/midwife (96% compared with 89% of mothers aged less than 20).

Attendance at ANC did not differ substantially by birth order.

Figure 9.1: Percentage receiving ANC by provider according to age group
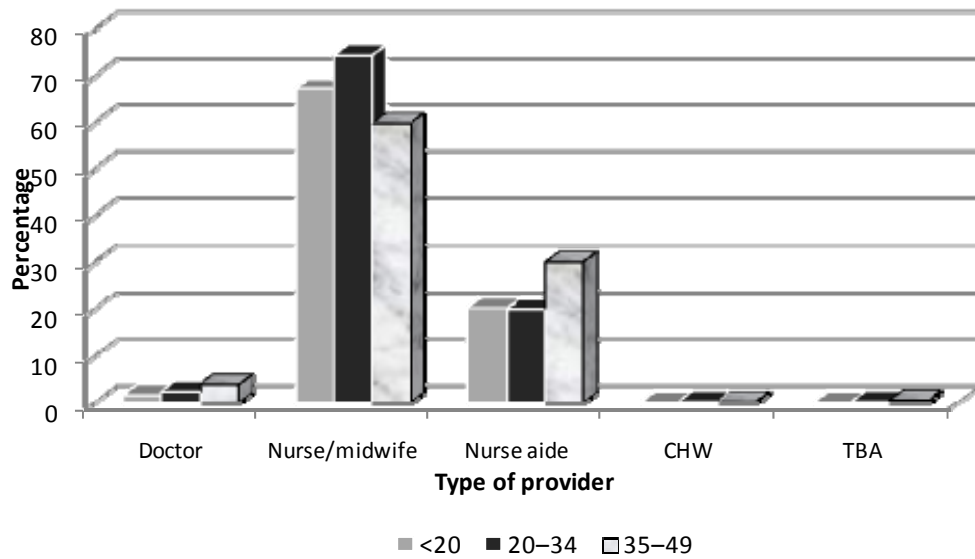
CHW=community healthcare worker
TBA=traditional birth attendant

Almost all women in urban and rural areas (95%) receive ANC from a skilled provider. Women in Honiara and Guadalcanal have a slightly lower percentage of delivery attendance by a skilled health provider than women in other provinces.

ANC coverage is associated with women's educational attainment. Better educated women are more likely to seek ANC and more likely to be attended to by a doctor than less educated women. Over 12% of women with a secondary level of education or higher received ANC from a doctor; the corresponding proportion for women with just a primary education is only 3%. In addition, % of women with no education received no ANC compared with only 2% who had a secondary level education and above.

Similarly, ANC is associated with wealth. Women in the highest wealth quintile were more likely to be attended to by a doctor than women in the lowest wealth quintiles. Less than 6% of women in the lowest quintile received no antenatal care compared with only 1–3% of women in the other wealth quintiles.

Table 9.1: Antenatal care

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

Background characteristic	Doctor	Nurse/ midwife	Nurse aide	Community health worker	Traditional birth attendant	Other	No one	Missing	Total	Percentage receiving antenatal care from a skilled provider[1]	Number of women
Mother's age at birth											
<20	1.6	66.9	20.0	0.0	0.0	0.1	9.5	1.8	100.0	88.5	148
20–34	2.3	74.1	19.7	0.2	0.2	0.7	2.1	0.7	100.0	96.1	1,404
35–49	3.8	59.7	29.9	0.2	0.5	1.3	3.2	1.3	100.0	93.5	247
Birth order											
1	1.1	74.0	20.7	0.0	0.2	0.4	2.9	0.7	100.0	95.8	341
2–3	3.6	70.7	19.1	0.1	0.0	1.2	4.1	1.2	100.0	93.4	652
4–5	1.8	76.5	18.5	0.4	0.4	0.6	1.0	0.9	100.0	96.7	488
6+	2.4	63.2	29.9	0.3	0.4	0.3	3.0	0.7	100.0	95.5	318
Residence											
Urban	4.7	79.6	10.5	0.3	0.1	2.4	2.0	0.6	100.0	94.7	236
Rural	2.1	70.3	22.8	0.2	0.2	0.5	3.0	1.0	100.0	95.2	1,562
Region											
Honiara	3.9	79.9	9.7	0.4	0.1	3.1	2.2	0.7	100.0	93.4	178
Guadalcanal	4.0	63.0	26.7	0.4	1.1	0.1	4.1	0.6	100.0	93.7	323
Malaita	3.0	66.5	25.9	0.2	0.0	0.0	2.4	2.0	100.0	95.4	420
Western	5.6	75.4	13.6	0.0	0.0	0.0	4.0	1.5	100.0	94.5	208
Other provinces	0.0	75.4	20.9	0.1	0.0	1.1	2.3	0.3	100.0	96.3	671
Mother's education											
No education	3.2	59.3	31.3	0.0	0.5	0.1	4.8	0.7	100.0	93.8	243
Primary	2.1	73.5	20.0	0.2	0.1	0.5	2.9	0.8	100.0	95.5	1,104
Secondary	2.1	73.6	19.1	0.2	0.4	1.8	1.5	1.3	100.0	94.7	406
More than secondary	10.4	70.6	14.3	0.0	0.0	1.1	2.0	1.7	100.0	95.3	46
Wealth quintile											
Lowest	1.6	62.4	28.0	0.1	0.7	0.1	5.9	1.1	100.0	92.1	412
Second	1.4	71.3	24.2	0.3	0.0	0.5	1.9	0.4	100.0	96.9	367
Middle	1.8	71.3	24.5	0.0	0.2	0.0	1.2	1.1	100.0	97.6	326
Fourth	2.9	77.3	13.4	0.2	0.0	1.7	2.9	1.6	100.0	93.6	363
Highest	4.7	77.1	14.4	0.4	0.0	1.5	1.5	0.4	100.0	96.2	330
Total	2.4	71.5	21.1	0.2	0.2	0.7	2.8	0.9	100.0	95.1	1,799

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications was considered in this tabulation.

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

9.1.1   Number of antenatal care visits and timing of the first visit

In line with WHO guidelines, the Solomon Islands Ministry of Health and Medical Services recommends that a woman who is having a normal pregnancy should attend four ANC visits, the first of which should take place during the first trimester. Information on ANC visits and the stage at which pregnant women seek ANC is presented in Table 9.1.1. Almost two out of three women (65%) receive four or more visits for ANC, while almost 20% do not receive the recommended number of ANC visits.

Table 9.1.1 further shows that only 15% of pregnant women receive their first visit during the first three months of pregnancy. A high proportion of women (43%) make their first ANC visit during the fourth or fifth month of pregnancy, while 30% make their first visit during the sixth month of pregnancy or later. The median gestational age when women make their first visit is 5.6 months, when the opportunity may have passed to diagnose problems early, provide treatment, and prevent complications.

Table 9.1.1: Number of antenatal care visits and timing of first visit

Percent 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, according to residence, Solomon Islands 2007

	Residence		
Number and timing of ANC visits	Urban	Rural	Total
Number of ANC visits			
None	2.0	3.0	2.8
1	2.4	2.7	2.7
2–3	19.3	11.5	12.6
4+	58.8	65.5	64.6
Don't know/missing	17.6	17.3	17.4
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	2.0	3.0	2.8
<4	11.2	15.8	15.2
4–5	33.9	44.4	43.0
6–7	42.7	28.5	30.4
8+	8.4	5.4	5.8
Don't know/missing	1.9	2.9	2.8
Total	100.0	100.0	100.0
Number of women	236	1,562	1,799
Median months pregnant at first visit (for those with ANC)	6.1	5.5	5.6
Number of women with ANC	230	1,501	1,731

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Table 9.1.2: Components of antenatal care

Among women age 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, Solomon Islands 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: | | | | | | |
	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	Weighed	Blood pressure measured	Urine sample taken	Blood sample taken	Number of women with ANC for their most recent birth
Mother's age at birth									
<20	89.0	37.2	148	50.1	96.7	100.0	87.9	80.4	131
20-34	92.0	40.8	1,404	55.7	98.9	98.8	91.1	78.2	1,365
35-49	89.8	51.6	247	51.8	99.0	99.6	89.6	80.9	236
Birth order									
1	91.5	34.7	341	51.9	98.4	99.5	92.0	84.8	329
2-3	91.3	39.6	652	55.8	98.9	98.9	91.8	75.2	618
4-5	91.9	46.3	488	54.9	98.6	98.5	89.3	79.4	479
6+	91.3	48.2	318	55.4	99.1	99.2	89.1	78.1	306
Residence									
Urban	90.0	30.0	236	59.9	99.6	99.6	98.6	98.2	230
Rural	91.7	43.8	1,562	54.0	98.6	98.9	89.4	75.7	1,501
Region									
Honiara	87.9	27.9	178	56.6	99.5	99.5	99.3	98.1	172
Guadalcanal	91.6	50.9	323	73.1	98.2	97.7	95.7	89.6	307
Malaita	91.8	20.0	420	42.1	98.0	98.2	73.8	79.6	401
Western	89.3	63.6	208	60.0	99.3	99.6	96.6	84.3	197
Other provinces	92.8	48.4	671	51.9	99.2	99.7	94.6	66.2	654
Mother's education									
No education	89.7	27.0	243	48.5	98.5	98.2	81.2	79.2	230
Primary	92.1	45.8	1,104	55.3	98.6	99.1	90.4	77.0	1,064
Secondary	91.3	41.1	406	56.8	99.1	99.0	96.1	81.1	394
More than secondary	87.1	37.1	46	55.5	99.0	99.2	98.2	96.3	44
Wealth quintile									
Lowest	91.8	37.3	412	52.6	97.7	98.2	87.7	64.2	383
Second	90.6	50.1	367	62.8	98.9	99.5	94.8	80.7	358
Middle	90.3	40.1	326	48.3	99.2	98.1	84.4	80.8	319
Fourth	92.3	42.8	363	48.1	99.5	100.0	91.1	78.5	347
Highest	92.4	39.7	330	62.0	98.6	99.0	95.3	91.8	324
Total	91.5	42.0	1,799	54.8	98.7	99.0	90.7	78.7	1,731

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9.1.2   Quality of Antenatal care

The Solomon Islands Obstetrics Guidelines (MOH 2007) provide details of what is to be done by a health service provider during antenatal care. Most health workers have been trained to offer the package.

Table 9.1.2 shows the percentage of mothers who receive ANC by content of ANC and background characteristics. The results show that the majority of women receive the minimum ANC. In general, 96% of women with a live birth in the last five years received some form of ANC for their most recent birth. The majority of women (92%) who gave birth in the five years preceding the survey took iron tablets or syrup during their last pregnancy. Almost all women (99%) who received ANC for their most recent birth in the past five years, had their weight measured during the pregnancy and their blood pressure taken. A urine sample was taken from 91% of women during an ANC, while a blood sample was taken from 79% of women. Only 55% of women received information on how to recognise signs of problems during pregnancy. Only 42% took drugs for intestinal parasites.

In summary, the results show that a full range of ANC is being provided. While the rate of coverage of four or more ANC visits is fairly high, concerted efforts are needed to improve the timing of visits and quality of ANC, especially education about early signs of pregnancy complications and the provision of antihelminthic drugs.

9.1.3   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. For full protection, a pregnant woman needs two doses of TT during pregnancy. However, if a woman was immunised before she became pregnant, she may require one or no TT injections during pregnancy, depending on the number of injections she has received and the timing of the last injection.

For a woman to have lifetime protection, a total of five doses are required. The 2006/2007 SIDHS collected data on whether or not women received at least two TT injections during pregnancy, and whether or not the pregnancy was protected against neonatal tetanus for women's most recent live birth in the five years preceding the survey. Table 9.1.3 shows that only 26% of pregnant women received two or more TT injections during their last pregnancy. However, 52% of women during their last pregnancy were protected against neonatal tetanus because of their previous immunisation. Younger women and women pregnant with lower order births are more likely to receive two TT injections during their pregnancy. However, the likelihood of having a pregnancy that is protected against neonatal tetanus does not appear to decline with mother's age at birth, and women who are pregnant with their first child are actually less likely to have their pregnancy protected against neonatal tetanus than women with 2–3 children. Previous pregnancies as well as increasing age may expose women to opportunities to receive TT injections that also contribute to protecting their later pregnancies.

Therefore, older and higher parity women may be less likely to require two TT injections during pregnancy in order for their pregnancies to be protected against neonatal tetanus.

Women in urban and rural areas are almost equally likely to have their last pregnancy protected against neonatal tetanus (48% urban, 53% rural). The proportion of women whose last pregnancy was protected against neonatal tetanus was highest in other provinces (67%). The proportion of women who had their last pregnancy protected against neonatal tetanus was lowest in Malaita and Western provinces. The likelihood of having the last pregnancy protected against neonatal tetanus increases with educational attainment but is variable across wealth quintiles.

Table 9.1.3: 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, Solomon Islands 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	31.7	46.8	148
20–34	25.7	53.1	1,404
35–49	23.7	48.6	247
Birth order			
1	41.5	51.3	341
2–3	26.5	54.9	652
4–5	20.6	51.0	488
6+	16.2	48.3	318
Residence			
Urban	26.4	47.6	236
Rural	25.9	52.6	1,562
Region			
Honiara	27.6	51.0	178
Guadalcanal	28.4	53.0	323
Malaita	19.2	29.4	420
Western	25.1	47.6	208
Other provinces	28.8	67.2	671
Mother's education			
No education	26.5	42.5	243
Primary	24.7	52.2	1,104
Secondary	29.2	56.8	406
More than secondary	23.2	54.6	46
Wealth quintile			
Lowest	22.1	59.3	412
Second	31.0	51.6	367
Middle	22.6	45.4	326
Fourth	26.7	47.2	363
Highest	27.6	54.9	330
Total	25.9	52.0	1,799

[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 10 years of the last live birth), or five or more injections prior to the last birth.

9.2   CHILDBIRTH CARE

Some of the factors associated with birth outcome include the place where a mother delivers her baby, the disinfection practices used there, the equipment available, and the skills and performance of those who assist the woman. Table 9.2 shows the percent distribution of live births in the five years preceding the survey by place of delivery and background characteristics of the mother.

Overall, 85% of births occurred at health facilities, and 14% of births took place at home. According to Table 9.2, births to younger women and lower order births are more likely to take place in a healthcare facility than births to older women and higher order births. For example, 81% of births to mothers aged 35–49 took place at a healthcare facility, whereas the corresponding figure for births to women under age 20 old is 88%. Similarly, 92% of first order births occurred at health facilities, compared with 82% of sixth and higher order births.

ANC attendance is related to place of childbirth. As expected, births to women who made four or more ANC visits are more likely to occur in a healthcare facility (88%) than births to women who did not attend antenatal care (53%).

The proportion of births occurring in a healthcare facility is much higher in urban areas (94%) than in rural areas (83%). Births in Honiara, Western and other provinces are more likely to take place in a healthcare facility (94%, 92% and 91%, respectively) compared with Guadalcanal (68%) and Malaita 80%) provinces.

Births to mothers with a secondary or higher education are more likely to occur in a healthcare facility (92%) than births to women with no education (67%). A woman's wealth status also has a direct correlation with the place where she gives birth to her baby. The proportion of births in a healthcare facility increases with increasing wealth quintile: 74% in the lowest wealth quintile to 94% in the highest quintile.

Table 9.2: Place of delivery

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

Background characteristic	Healthcare facility		Home	Other	Missing	Total	Percentage delivered in a healthcare facility	Number of births
	Public sector	Private sector						
Mother's age at birth								
<20	82.8	5.0	10.1	0.0	2.0	100.0	87.8	253
20–34	78.9	5.8	14.1	0.1	1.0	100.0	84.7	2,107
35–49	75.6	4.9	18.0	0.0	1.5	100.0	80.5	308
Birth order								
1	85.1	6.6	7.1	0.1	1.2	100.0	91.7	577
2–3	79.1	6.6	12.7	0.2	1.4	100.0	85.7	989
4–5	73.6	4.9	20.4	0.0	1.0	100.0	78.5	680
6+	78.3	3.2	17.5	0.0	1.0	100.0	81.5	422
Residence								
Urban	91.7	2.6	3.9	0.4	1.3	100.0	94.4	330
Rural	77.0	6.1	15.6	0.1	1.2	100.0	83.1	2,338
Region								
Honiara	92.0	1.5	4.2	0.6	1.7	100.0	93.5	249
Guadalcanal	68.3	0.0	29.3	0.0	2.4	100.0	68.3	483
Malaita	77.3	3.0	18.3	0.2	1.3	100.0	80.2	678
Western	66.0	26.0	6.1	0.0	1.8	100.0	92.0	289
Other provinces	85.7	5.3	8.8	0.0	0.2	100.0	91.0	969
Mother's education								
No education	65.0	2.3	30.1	0.2	2.4	100.0	67.3	373
Primary	79.4	6.4	13.4	0.1	0.7	100.0	85.8	1,662
Secondary	85.3	5.9	7.3	0.0	1.5	100.0	91.2	571
More than secondary	88.6	3.7	3.2	0.2	4.3	100.0	92.3	62
Antenatal care visits[1]								
None	51.6	1.2	45.5	0.0	1.7	100.0	52.8	51
1–3	80.4	4.2	15.2	0.1	0.0	100.0	84.7	273
4+	82.9	5.3	11.6	0.1	0.0	100.0	88.3	1,162
Wealth quintile								
Lowest	72.0	2.1	24.0	0.0	1.8	100.0	74.2	646
Second	78.9	5.9	14.3	0.0	0.8	100.0	84.8	552
Middle	77.7	4.7	16.4	0.3	1.0	100.0	82.3	484
Fourth	81.3	8.9	8.5	0.0	1.2	100.0	90.2	513
Highest	86.8	7.5	4.5	0.3	0.9	100.0	94.3	472
Total	78.9	5.6	14.2	0.1	1.2	100.0	84.5	2,668

[1] Includes only the most recent birth in the five years preceding the survey.
Note: Total includes 313 cases with missing information on number of antenatal care visits.

9.3   ASSISTANCE DURING CHILDBIRTH

In addition to place of birth, assistance during childbirth is an important variable that influences the birth outcome and the health of the mother and the infant. This is because the skills and performance of the birth attendant determine whether or not he or she can manage complications and observe hygienic practices. Table 9.3 shows the percent distribution of live births in the five years preceding the survey by person providing assistance, according to background characteristics of the mother.

Overall, 86% of births are assisted by a skilled provider during delivery. About 4% of births are delivered with the assistance of a doctor, 66% are assisted by a nurse/midwife, and 15% are assisted by a nurse's aide. Less than 1% of births are assisted by a traditional birth attendant or community healthcare worker. For 1.5% of births, the mother received no assistance during childbirth.

Younger women are more likely to receive assistance during childbirth from a skilled provider than are older women. In Figure 9.2 women are more likely to receive assistance from a nurse/midwife, particularly during the birth of their first infant. Women are also more likely to receive assistance from a doctor during delivery of their first infant than higher parity women.

Figure 9.2: Assistance during delivery by type of provider and birth order
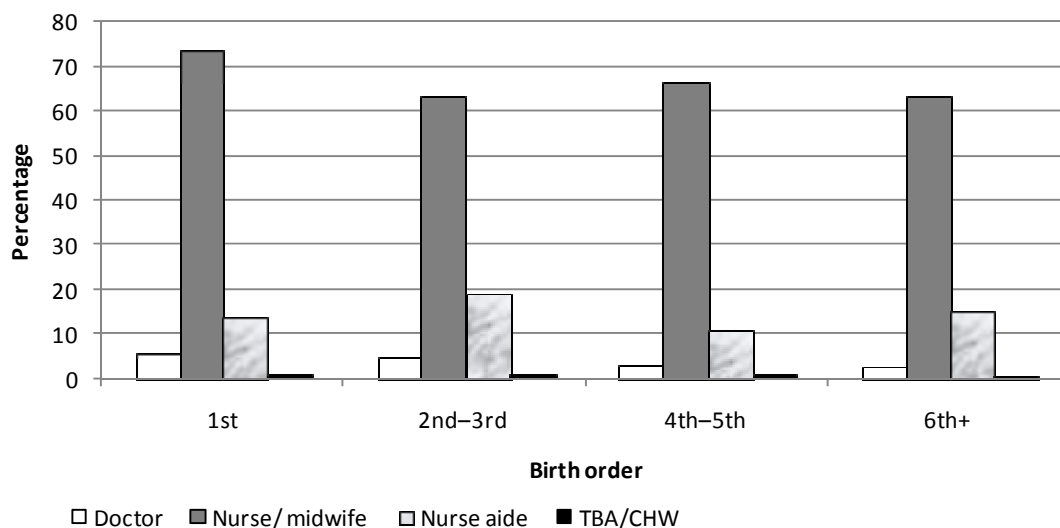
CHW=community healthcare worker
TBA=traditional birth attendant

Approximately 95% of urban women are attended to by a skilled provider, compared with only 84% of rural women. By province, percentage of births attended to by a skilled provider ranges from 69% of births in Guadalcanal to 94% in Honiara. In Western Province, the percentages of births by skilled providers was 93% and in other provinces 92%. Approximately 82% of births in Malaita are attended to by a skilled provider.

Women who have attained a secondary education are more likely to be assisted at childbirth by a skilled provider (92%) than women with no education (69%). The likelihood of receiving skilled attendance at birth increases with wealth quintile, from 74% of births in the lowest quintile to 95% in the highest wealth quintile. Use of a traditional birth attendant is highest among births to women in the lower wealth quintiles.

Table 9.3 presents data on prevalence of births by caesarean section (C-section). Overall, 6% of births were delivered by C-section. C-sections are more common among first births, among births to younger women, births to women in urban areas, and births to women with a secondary or higher education. The results show inequity with regard to access to C-sections across the wealth

quintiles, with 4% of births to women in the lowest wealth quintile compared with 10% of births to women in the highest wealth quintile. Slightly less than 10% of births in Honiara are delivered by C-section compared with only 4% in Western Province. The low percent of deliveries by C-section in Western Province may reflect the limited number of medical doctors there.

Figure 9.3: Percentage delivered by a skilled provider by background characteristics
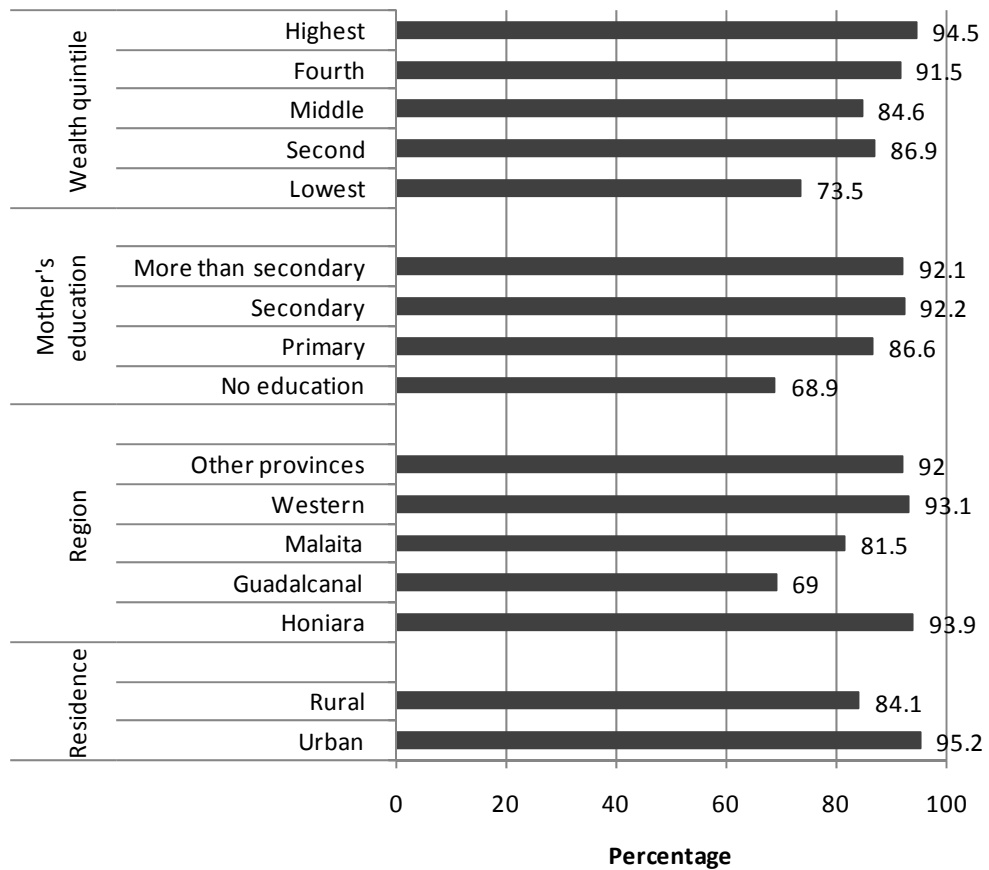
Table 9.3: Assistance during delivery

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

Background characteristic	Doctor	Nurse/ midwife	Nurse aide	Traditional birth attendant /Community healthcare worker	Other	No one	Don't know/ missing	Total	Percentage delivered by a skilled provider[1]	Percentage delivered by C-section	Number of births
Mother's age at birth											
<20	4.5	64.5	19.0	1.3	3.0	0.9	6.8	100.0	88.0	11.4	253
20–34	4.2	66.3	15.3	0.5	4.5	1.5	7.7	100.0	85.9	5.6	2,107
35–49	3.1	65.5	12.0	0.2	4.4	2.2	12.6	100.0	80.6	5.8	308
Birth order											
1	5.4	73.2	13.9	0.6	3.0	0.1	3.9	100.0	92.4	13.7	577
2–3	4.7	63.1	19.2	0.6	3.3	1.2	7.9	100.0	87.0	4.6	989
4–5	2.9	66.1	11.0	0.5	6.8	1.8	10.9	100.0	80.0	2.8	680
6+	2.8	63.1	15.2	0.1	4.8	3.7	10.3	100.0	81.1	5.3	422
Place of delivery											
Health facility	4.8	76.7	17.6	0.0	0.4	0.0	0.5	100.0	99.1	7.3	2,255
Elsewhere	0.2	8.4	3.0	3.5	28.2	10.1	46.7	100.0	11.6	0.0	381
Residence											
Urban	8.6	81.2	5.4	0.3	0.5	0.3	3.7	100.0	95.2	8.1	330
Rural	3.5	63.9	16.7	0.5	4.9	1.7	8.8	100.0	84.1	5.9	2,338
Region											
Honiara	8.2	82.0	3.8	0.1	0.7	0.4	4.9	100.0	93.9	9.9	249
Guadalcanal	3.9	55.9	9.2	1.8	4.9	2.5	21.9	100.0	69.0	5.7	483
Malaita	4.8	55.8	20.9	0.3	8.3	3.4	6.5	100.0	81.5	7.6	678
Western	5.7	80.4	7.0	0.8	1.0	0.4	4.7	100.0	93.1	4.1	289
Other provinces	2.2	69.9	19.9	0.0	3.2	0.3	4.4	100.0	92.0	5.2	969
Mother's education											
No education	2.2	47.7	19.0	0.7	8.7	4.9	16.8	100.0	68.9	5.3	373
Primary	4.1	66.6	15.8	0.6	4.0	1.2	7.7	100.0	86.6	4.9	1,662
Secondary	3.9	76.0	12.4	0.3	3.1	0.2	4.2	100.0	92.2	10.6	571
More than secondary	17.1	68.7	6.3	0.0	0.0	0.7	7.2	100.0	92.1	6.4	62

Table 9.3: (continued)

| Background characteristic | Person providing assistance during delivery: | | | | | | | | Percentage delivered by a skilled provider[1] | Percentage delivered by C-section | Number of births |
	Doctor	Nurse/ midwife	Nurse aide	Traditional birth attendant /Community healthcare worker	Other	No one	Don't know/ missing	Total			
Wealth quintile											
Lowest	2.7	52.8	17.9	0.6	8.3	2.3	15.3	100.0	73.5	3.7	646
Second	1.9	66.4	18.6	0.6	3.4	1.6	7.5	100.0	86.9	8.0	552
Middle	3.3	66.3	14.9	0.3	5.0	2.1	7.9	100.0	84.6	4.7	484
Fourth	4.6	70.0	16.9	0.5	2.6	1.0	4.4	100.0	91.5	5.1	513
Highest	8.8	79.1	6.6	0.5	1.3	0.2	3.6	100.0	94.5	10.2	472
Total	4.1	66.0	15.3	0.5	4.4	1.5	8.2	100.0	85.5	6.2	2,668

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.
Total includes 32 cases with missing information on place of delivery.
[1] Skilled provider includes doctor, nurse, midwife and auxiliary nurse/midwife.

9.4   POSTPARTUM CARE

Postpartum care is important — both for the mother and for the child — for treating complications arising from the delivery as well as for providing 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. The timing of postpartum care is important. The first two days after delivery are critical, since most maternal and neonatal deaths occur during this period. The Solomon Islands Obstetrics Guidelines recommend that a mother should attend postpartum care during the puerperal period to check for possible complications. Through the provision of integrated services, the Ministry of Health and Medical Services recommends that mothers receive postpartum care immediately postpartum, and when they bring their infants for immunisation at 6 weeks.

Table 9.4: Timing of first postnatal check-up

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

Background characteristic	Timing after delivery of mother's first postnatal check-up					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	19.9	1.1	19.6	19.2	8.9	31.3	100.0	148
20–34	30.7	3.8	17.3	16.9	5.4	26.0	100.0	1,404
35–49	28.9	1.7	21.9	21.3	6.1	20.1	100.0	247
Birth order								
1	25.7	5.5	20.4	21.6	6.5	20.3	100.0	341
2–3	32.6	3.1	16.4	16.7	5.2	25.9	100.0	652
4–5	27.6	2.0	19.1	16.6	5.8	28.8	100.0	488
6+	30.4	3.1	17.3	17.2	6.0	26.0	100.0	318
Residence								
Urban	32.6	4.8	27.6	13.6	4.4	16.9	100.0	236
Rural	29.1	3.0	16.6	18.3	6.0	27.0	100.0	1,562
Region								
Honiara	25.7	5.1	28.9	16.9	4.1	19.3	100.0	178
Guadalcanal	47.1	3.1	16.7	7.1	3.3	22.6	100.0	323
Malaita	29.7	6.3	16.8	9.0	11.2	26.9	100.0	420
Western	31.2	1.8	24.6	17.3	5.7	19.4	100.0	208
Other provinces	21.5	1.4	14.6	28.6	4.0	29.9	100.0	671
Education								
No education	35.7	4.0	16.2	11.6	7.8	24.7	100.0	243
Primary	28.2	2.6	18.0	19.3	5.2	26.7	100.0	1,104
Secondary	30.0	4.1	19.2	16.5	5.9	24.2	100.0	406
More than secondary	25.2	8.0	19.5	23.5	6.6	17.2	100.0	46
Wealth quintile								
Lowest	29.9	1.5	9.4	16.6	6.0	36.6	100.0	412
Second	23.9	4.8	19.4	19.7	7.8	24.3	100.0	367
Middle	29.4	2.2	18.3	21.9	4.8	23.5	100.0	326
Fourth	30.0	2.0	20.9	17.7	4.9	24.5	100.0	363
Highest	35.0	6.3	24.1	12.7	5.2	16.7	100.0	330
Total	29.5	3.3	18.1	17.7	5.8	25.6	100.0	1,799

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

In the 2006/2007 SIDHS, the extent of postnatal care was determined by asking mothers whether they had received a phealth check after the delivery of their last birth in the five years preceding

the survey, when they received the first check, and what type of health provider they saw for postnatal care.

Table 9.4 shows the timing of the first postpartum check-up by background characteristics, and indicates that 26% of women did not receive postpartum care for their last birth, 30% received postpartum care within four hours after giving birth, and 18% received postpartum care within the first two days. Older women, women with first-order births, urban women, better-educated women, and those in the highest wealth quintile are more likely to seek postpartum care than other women.

A slightly higher proportion of women in Honiara, Western, and Guadalcanal provinces received a postpartum check-up. Women in Malaita and other provinces are less likely to receive a postpartum check-up.

9.4.1   Type of provider for the first postpartum check-up

The type of provider for postpartum care was assessed. This is important because the skills of a provider determine the ability to diagnose problems and to recommend appropriate treatment or referral. Table 9.4.1 shows that 57% of women received postpartum care from a doctor, nurse or midwife, while 14% received postpartum care from an auxiliary nurse/midwife, and less than 1% from other healthcare professionals. About 2% of women received postpartum care from a traditional birth attendant.

Women aged 35–49, those who gave birth to their first child, urban women, those with a secondary education and above, those in the highest wealth quintile, and women in Western Province and Honiara are more likely to receive postpartum care from skilled professionals. Use of a doctor, nurse or midwife for postpartum care in Malaita (52%) and other provinces (50%) are lower than the national average. Women from Guadalcanal were the mostly likely to use a traditional birth attendant (7%) compared with women from other provinces. Older women, women with six or more children, women with no education and women in the lowest wealth quintile were the most likely to use a traditional birth attendant for postpartum care. The highest proportions of women receiving postnatal care from an auxiliary nurse/midwife were those in rural areas, those from Malaita and other provinces, those with no education and those in the second lowest wealth quintile.

Table 9.4.1: Type of provider of first postnatal check-up

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

Background characteristic	Doctor/ nurse/ midwife	Auxiliary nurse/ midwife	Nurse aide	Traditional birth attendant	Other	Don't know/ missing	No postnatal checkup[1]	Total	Number of women
Mother's age at birth									
<20	52.6	13.5	0.0	0.4	1.2	0.9	31.3	100.0	148
20–34	57.1	13.8	0.1	1.6	0.9	0.5	26.0	100.0	1,404
35–49	61.9	12.5	0.0	3.9	1.2	0.4	20.1	100.0	247
Birth order									
1	65.4	11.7	0.0	0.4	1.8	0.4	20.3	100.0	341
2–3	55.6	15.7	0.1	1.5	0.5	0.7	25.9	100.0	652
4–5	57.8	10.3	0.1	1.8	0.9	0.2	28.8	100.0	488
6+	51.8	16.4	0.0	4.1	0.9	0.8	26.0	100.0	318
Residence									
Urban	75.8	4.9	0.0	0.1	1.3	0.9	16.9	100.0	236
Rural	54.6	14.9	0.1	2.1	0.9	0.5	27.0	100.0	1,562
Region									
Honiara	74.4	3.1	0.0	0.2	1.8	1.2	19.3	100.0	178
Guadalcanal	60.5	9.4	0.4	6.6	0.2	0.3	22.6	100.0	323
Malaita	51.5	19.4	0.0	0.4	0.4	1.3	26.9	100.0	420
Western	75.2	4.9	0.0	0.0	0.0	0.4	19.4	100.0	208
Other provinces	49.6	17.5	0.0	1.4	1.7	0.0	29.9	100.0	671
Education									
No education	49.6	20.3	0.0	5.3	0.2	0.0	24.7	100.0	243
Primary	56.0	14.2	0.1	1.7	0.7	0.6	26.7	100.0	1,104
Secondary	64.7	8.4	0.0	0.2	2.2	0.3	24.2	100.0	406
More than secondary	68.1	9.2	0.0	0.0	0.7	4.8	17.2	100.0	46
Wealth quintile									
Lowest	41.8	15.4	0.2	5.7	0.3	0.0	36.6	100.0	412
Second	57.2	16.7	0.0	0.6	0.6	0.5	24.3	100.0	367
Middle	61.7	12.1	0.0	0.8	1.1	0.7	23.5	100.0	326
Fourth	58.5	14.1	0.0	1.1	1.1	0.7	24.5	100.0	363
Highest	71.7	8.8	0.2	0.1	1.7	0.8	16.7	100.0	330
Total	57.4	13.6	0.1	1.8	0.9	0.5	25.6	100.0	1,799

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

9.5 PROBLEMS ENCOUNTERED IN ACCESSING HEALTH CARE

Many factors can prevent women from receiving medical advice or treatment when they are sick. Information on such factors is particularly important in understanding and addressing the barriers women may face in seeking care during pregnancy and at the time of delivery.

The 2006/2007 SIDHS assessed problems encountered in accessing health care. Table 9.5 shows the percentage of women who reported various types of serious problems in accessing health care.

Overall, 96% of women reported that they encounter at least one serious problem in accessing health care. About 89% of women reported that no available drugs is a serious problem in accessing health care.

Concern that no provider is available (85%) is the second most common problem, followed by getting money for treatment (62%) and the concern that there is no female provider (59%). Other reported problems include having to take transport (55%) and the distance to a healthcare facility (53%). The least reported problems related to not wanting to go alone to a health facility (44%) and getting permission (28%).

Looking at the results by age and birth order, older women and women with more children are the most likely to cite concern about the availability of providers and drugs as major problems in accessing health care. Younger women and those with fewer children, on the other hand, are more likely to cite getting permission, not wanting to go alone, and a concern that there would be no female provider as major problems in accessing health care. Divorced, separated, or widowed women are generally more constrained in getting money for treatment and having to take transport than currently married and never married women.

By employment status, unemployed women are most likely to report having problems in getting money for treatment, distance from the health facility, not wanting to take transport and having to go alone. Women who are employed — but not for cash — are usually more likely than other women to report getting permission to go for treatment, concern that there was no female provider, or no drugs available.

Rural women are more likely than urban women to report having each of the problems asked about in accessing health care. They are especially more likely to report that getting money for treatment, distance to a health facility and having to take transport are serious problems.

Over 97% of women in Guadalcanal, Malaita and other provinces reported that at least one of the items asked about was a serious problem in accessing health care. Women from Guadalcanal were most likely to report having at least one problem with access to health care, with distance to a healthcare facility, having to take transport and not wanting to go alone being the major concerns. By contrast, 87% of women in Honiara reported at least one serious problem in accessing health care. Getting money for treatment was a serious problem for more women in Western Province (69%) than in other provinces.

Less educated women are more likely to report at least one serious problem in accessing health care compared with other women. Women with only a primary level education had the highest level of concern for each problem in accessing health care. Women with a secondary education or higher had the lowest levels of concern about problems in accessing health care.

Wealth has an especially strong association with reporting all types of problems with access to health care. Table 9.5 shows that women in the lowest wealth quintile are much more likely than women in other wealth quintiles to report getting permission to go for treatment, distance to a healthcare facility, having to take transport, not wanting to go alone and concern that no female provider or drugs were available as serious problems in accessing health care. As expected, the proportion of women with problem of getting money to gain access to health care decreases as the increasing in their wealth quintile.

Table 9.5: 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, Solomon Islands 2007

Background characteristic	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	Number of women
Age										
15–19	31.8	65.2	55.5	54.2	55.8	64.0	87.8	90.5	97.0	687
20–34	27.2	61.7	52.9	55.3	42.5	57.8	83.4	87.8	95.1	2,045
35–49	25.4	61.6	51.2	53.1	37.7	56.8	87.2	91.1	96.3	1,091
Number of living children										
0	29.0	61.9	52.3	51.3	50.7	59.2	83.9	88.2	95.1	1,213
1–2	27.6	64.9	52.6	52.7	39.9	60.4	84.5	87.5	95.4	954
3–4	27.5	60.0	56.1	61.1	41.6	59.5	85.6	89.6	96.2	885
5+	25.2	62.4	50.4	53.9	38.9	54.4	88.1	92.5	96.8	772
Marital status										
Never married	30.8	61.7	54.2	53.3	50.3	62.3	87.5	89.9	95.9	1,125
Married or living together	26.3	62.2	52.2	54.8	40.9	57.5	84.9	89.3	95.7	2,560
Divorced/separated/widowed	24.0	70.4	53.9	56.9	36.6	48.5	74.3	82.7	96.5	138
Employed last 12 months										
Not employed	28.4	65.6	56.4	59.2	46.6	59.9	85.5	89.0	95.6	2,253
Employed for cash	18.5	49.8	48.3	44.0	38.0	48.2	77.1	85.7	93.2	655
Employed not for cash	31.9	63.3	47.8	50.5	39.7	62.8	90.7	92.5	97.9	909
Residence										
Urban	17.0	47.7	38.1	36.0	39.0	51.2	76.2	80.1	88.6	636
Rural	29.6	65.2	55.8	58.1	44.4	60.1	87.1	91.1	97.2	3,187
Region										
Honiara	16.5	46.0	36.5	35.7	39.7	55.0	73.6	76.9	86.5	481
Guadalcanal	23.2	66.3	67.4	65.5	54.3	42.1	72.0	86.2	98.2	637
Malaita	12.7	58.9	45.0	45.4	34.5	53.4	89.1	92.2	97.0	840
Western	31.3	69.4	62.6	59.5	37.4	58.3	88.8	90.7	93.9	458
Other provinces	40.8	65.9	53.5	59.6	47.3	70.5	91.8	92.6	97.7	1,407

Table 9.5: (continued)

Background characteristic	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	Number of women
Education										
No education	25.7	66.2	52.6	56.9	44.7	58.5	87.1	89.5	96.7	520
Primary	30.3	66.2	56.4	58.6	44.6	60.2	87.4	91.6	97.0	2,114
Secondary	23.5	55.3	48.1	47.4	42.2	56.7	81.8	85.7	93.9	1,067
More than secondary	23.3	40.7	35.1	34.5	30.5	46.9	70.7	78.8	86.4	122
Wealth quintile										
Lowest	38.7	77.1	65.3	69.6	52.5	68.8	92.3	95.6	98.7	696
Second	31.8	65.7	52.2	55.8	44.1	58.9	91.7	94.2	98.6	755
Middle	27.4	64.3	56.9	58.1	47.2	58.1	86.1	90.9	97.5	738
Fourth	23.4	60.3	51.1	53.1	38.0	55.7	81.7	85.3	94.8	769
Highest	18.5	47.5	41.6	39.2	37.6	53.0	76.7	81.9	90.3	864
Total	27.5	62.3	52.9	54.5	43.5	58.6	85.3	89.2	95.8	3,823

Note: Total includes seven cases with missing information on employment status.

9.6   KEY RESULTS

Ninety-five percent of women who had a live birth in the five years preceding the survey received ANC from a skilled healthcare professional for their last birth. Over three in five women (65%) make four or more ANC visits during their entire pregnancy. The median number of months of pregnancy when women seek their first ANC visit is 5.6 months, indicating that Solomon Islands women start ANC at a relatively late stage in pregnancy.

Among women who received ANC, over half (55%) reported that they were informed about how to recognise signs of problems during pregnancy. A weight measurement was taken for 98.7% of women and blood pressure was taken for 99% of women. Urine and blood samples were taken for 91% and 79% of women, respectively. Only 26% of women received two or more tetanus toxoid injections during their last pregnancy. An estimated of 52% of births were reported to be protected against neonatal tetanus because of previous immunisations the mother had received.

Over eight in ten births occur in a healthcare facility. Overall, 85% of births were delivered with the assistance of a trained health professional — a doctor, nurse, midwife, medical assistant, or clinical officer — while 0.5% were delivered by a traditional birth attendant. About 4.4% of births were attended to by other people, while 1.5% of births were delivered without any type of assistance at all.

Postpartum care is reported to be high in Solomon Islands. Only 26% of women who had a live birth in the five years preceding the survey received no postnatal care at all, and 51% of mothers received postnatal care within the critical first two days after delivery. About 71% of women received first postnatal care from trained health professionals while about 2% were cared for by traditional birth attendant.

Concern that no drugs were available, no female care provider was available and getting money for treatment were the most commonly cited problems in accessing health care in Solomon Islands.