MORTALITY PATTERNS IN GUYANA
An Occasional Working Paper Produced
By Bureau of Statistics, Guyana[1]
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1.1 Introduction

One major indicator often used to measure quality of life is mortality patterns, which can be determined by how long the population is expected to live on average, and the age and sex patterns of mortality. This being one of the major goals of the Millennium Development plan, the main objectives of this occasional paper are as follow:

- Calculate the age specific death rates;
- Construct Guyana life tables and elaborate on the importance of the following functions:
  a). the probability of dying; and
  b). average life expectancy for males, females and both sexes combined.

1.2 Data Requirements

The data required for this method are described below:

- Registered deaths by age and sex for Guyana in 2004; and
- 2002 census population distribution by age and sex, adjusted to 2004 to correspond to the reference period to which the deaths occurred.

1.3 Age Specific Death Rates

The death rate of a particular age group is referred to as an age specific death rate. It is derived by dividing the total deaths in each age by the corresponding total population in the same age group.

The age specific death rates for the entire country and for males and females separately, are reflected in the last three columns of Table 1, and graphically illustrated in Figure 1. The feature of the death pattern is J-shape curve, indicating less number of infant and childhood deaths, and as expected, concentration of deaths in the terminal ages. This is a pattern usually depicted by developed countries, and symbolic of long term improvement in the health sector. But, unlike Guyana, many less developed countries have U-shape pattern of age specific death rates; reflecting high infant and childhood deaths, as against high number of deaths which occurred in the advanced ages, primarily due to old age

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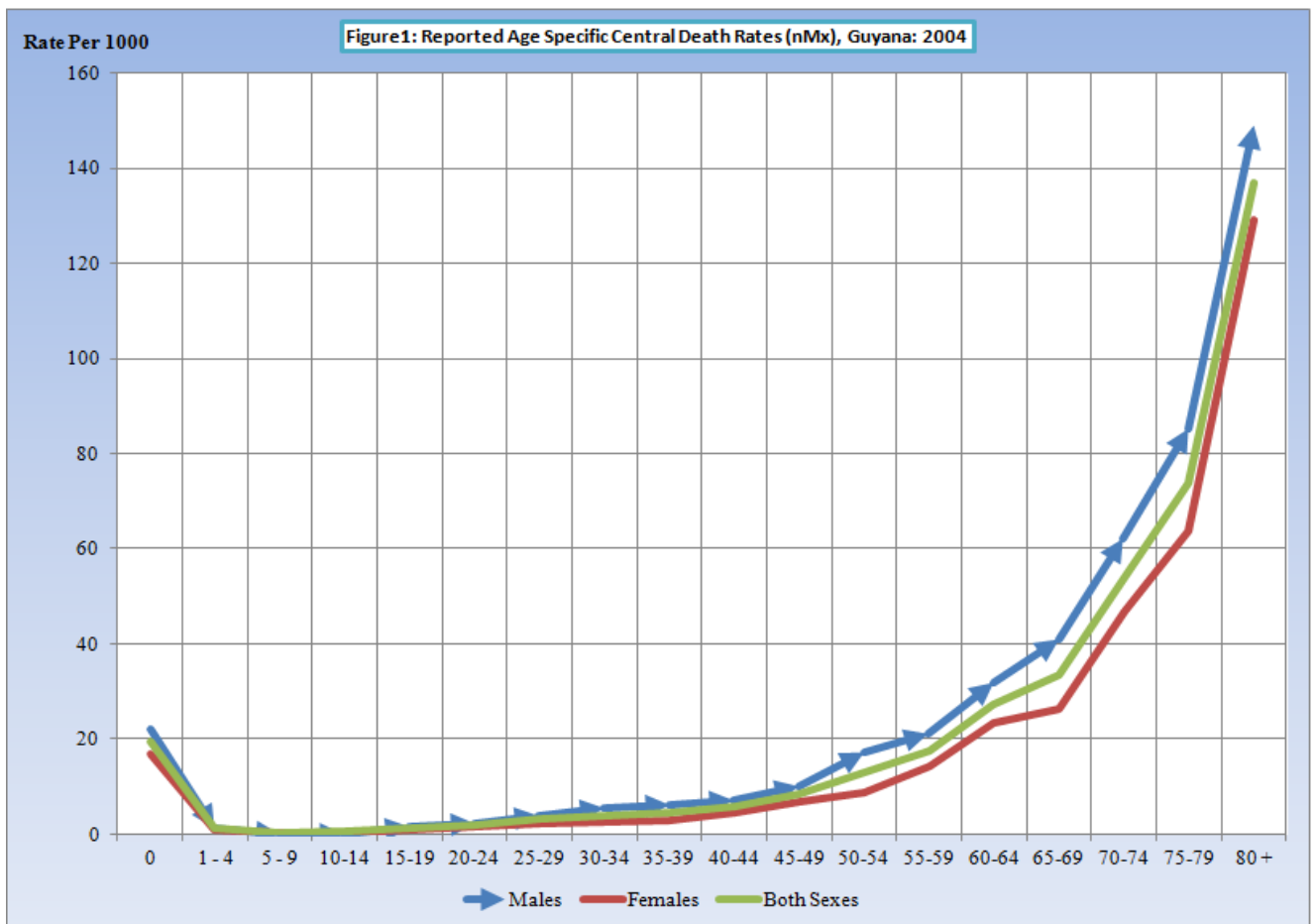
exhaustion (see Table 1 and Figure 1). The source of data being registered deaths in 2004; part of the reasons for the deviation of Guyana from the pattern observed in developing countries could be under-reporting of infant deaths, particularly in the rural areas where such vital statistics are difficult to be accurately recorded.

Age group	Population[1]			Deaths			Age Specific Death Rates[2]		
	Males	**Females**	**Total**	**Males**	**Females**	**Total**	**Males**	**Females**	**Total**
0	8,843	8,614	17,457	196	146	343	0.022194	0.017002	0.019632
1 - 4	37,151	35,701	72,852	49	37	87	0.001328	0.001047	0.001190
5 - 9	49,883	48,215	98,099	12	20	32	0.000242	0.000419	0.000329
10-14	41,859	40,841	82,700	21	16	37	0.000505	0.000395	0.000451
15-19	34,018	33,896	67,914	59	29	89	0.001746	0.000864	0.001306
20-24	32,406	32,962	65,368	69	55	124	0.002143	0.001655	0.001897
25-29	30,702	31,293	61,995	120	69	188	0.003901	0.002195	0.003040
30-34	29,538	29,264	58,802	160	75	235	0.005418	0.002554	0.003993
35-39	26,848	26,667	53,515	164	80	244	0.006111	0.002992	0.004557
40-44	23,700	23,479	47,178	171	102	273	0.007220	0.004345	0.005789
45-49	18,231	18,114	36,345	184	123	307	0.010104	0.006803	0.008459
50-54	14,429	14,140	28,569	250	123	373	0.017300	0.008714	0.013051
55-59	9,120	9,279	18,399	192	132	325	0.021080	0.014260	0.017641
60-64	7,303	7,924	15,227	233	185	417	0.031838	0.023326	0.027409
65-69	5,662	6,254	11,916	233	165	397	0.041064	0.026324	0.033328
70-74	4,027	4,642	8,669	251	217	468	0.062236	0.046782	0.053961
75-79	2,548	2,988	5,536	217	191	408	0.085327	0.063887	0.073755
80 +	2,333	3,476	5,809	347	448	796	0.148844	0.129016	0.136979
Total	**378,600**	**377,749**	**756,349**	**2,929**	**2,214**	**5,143**	**7.74**	**5.86**	**6.80**

Table 1: Distribution of population and deaths by age and sex and age-specific death rates, Guyana: 2004

Note[1]: Estimates, and based on the 2002 census to correspond to the reference year of the deaths.

Note[2]: ASDR = deaths in each age group/population in that same age group multiply by 1,000.

Source: Bureau of Statistics, Guyana

Figure 1: Reported Age Specific Central Death Rates (nMx), Guyana: 2004

1.4   Guyana Life Tables

In this section, two types of life tables (abridged and unabridged or complete life tables) have been constructed, to vividly show the patterns of deaths in Guyana. The abridged life tables display the life table functions by 5-year age groups, while the complete life tables show the functions by single years of age, as reflected in Appendices 1 to 3 for abridged life tables, and Appendices 4 to 6 for unabridged or complete life tables.

1.4.1   The Uses of the Life Tables

Life tables have varieties of uses in the population studies. They are necessary tools in the study of the three components of the population change; namely: fertility, mortality and migration. Also, life tables are used in population projections, determining the population structure, and various social and economic characteristics of the population, such as labour force, marital status, educational status, etc.
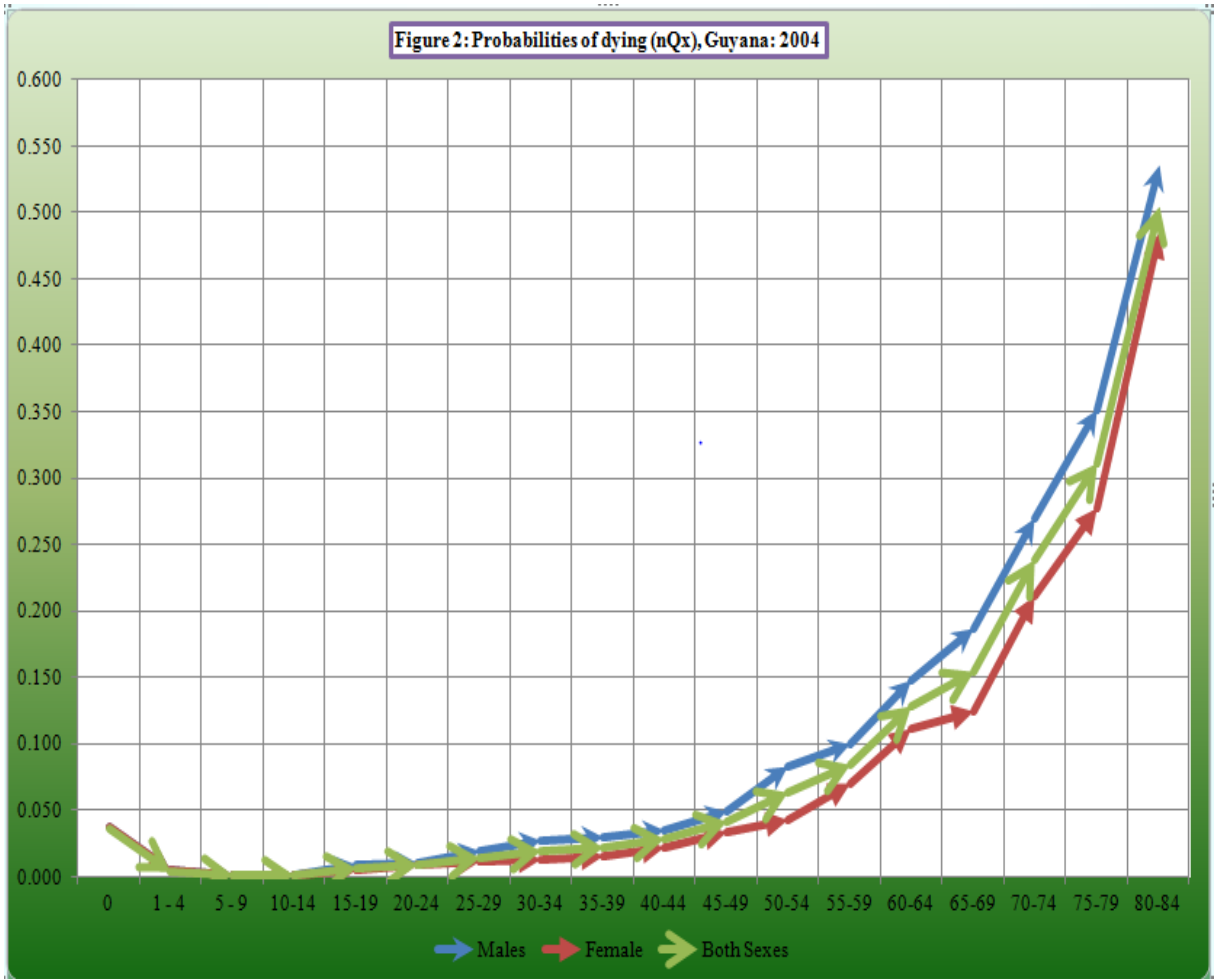
1.4.2   Nature of the Life Tables

A life table begins with a radix, say 100,000 or 10,000, etc. births assumed to have occurred at a single moment (in this case, it begins with 100,000). This theoretical cohort is expected to reduce at each age, according to the prevailing death rates, to arrive at survivors at the beginning of the next age. It is a theoretical population, which has never existed and will never exist in reality. It is constructed to show what the effects of mortality on the population would be, if it were not being affected also by fertility and migration.

1.4.3   Probabilities of Dying

The probability of dying is a life table function which shows the proportion of a cohort alive at the beginning of an indicated age interval, who will die before reaching the end of that age internal. It is represented by $_nq_x$ on the life tables. For example, in column 3, Appendix 1, the proportion of males 15-19 years dying is 0.008697. This means that, out of every 1,000 males alive, and exactly 15 years old at the beginning of the period, 8.70 will die before reaching their 20th birthday. Similarly, females who are exactly 15 years, 4.31 per every 1,000, will die before reaching the 20th birthday (see column 3, Appendices 1 to 3). The graphical presentation of these probabilities is illustrated in Figure 2, and seems to present a concave pattern.

In the case of complete life tables, where the functions are given by single years, the probabilities are interpreted in term of a year period. For instance, for the males and females 14 years, the proportions dying are 0.00077 and 0.00050 respectively, meaning that, out of every 1,000 males and females alive and exactly 14 years old at the beginning of a year, 0.77 and 0.50 will die before reaching the end of the year or their 15th birthday (see columns 3, Appendices 4 to 6).

Simply, these probabilities of dying can be applied to census or survey population age distribution to derive an estimated mortality or visa-vi survival figures by age and sex. For instance, in Table 1, the male population in age group, 15-19 years is 34,018 persons, but the corresponding probability of dying shown in Appendix 1 is 0.008697. Applying this rate to the population means that, out of those who are alive and passing through 15-19 years, about 296 will die before reaching their 20th birthday, while 33,722 will survive to celebrate the 20th birthday.

Figure 2: Probabilities of dying (nQx), Guyana: 2004

1.4.4 Expectation of Life at Birth

The expectation of life at birth is average number of years a newborn baby can expect to live, if the current mortality trends of mortality continue. It is highly influenced by infant mortality rate, and most frequently used as an index of the level of mortality. The reciprocal of the life expectancy (e_{0x}) is an equivalent to robust estimate of crude death rate.

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Table 2: Summary Measures from Life Tables, Guyana: 2004			
Summary Measure	Males	Females	Both Sexes
Life Expectancy	63.09	68.32	65.60
Crude death Rate ($1/e_{0x}$)	15.85	14.64	15.24

In Guyana, a newborn baby boy and girl are expected to live up to 63.09 and 68.32 years respectively. The details expectation of life for males, females and both sexes combined across the ages are shown in column 8, Appendices 1 to 3 and column 5, Appendices 4 to 6. The slight differences observed for these results shown by the two types of the life tables (the abridged life tables and the complete life tables) are due to rounding.

Table 2 shows the summary measures of the expectation of life at birth and its reciprocal ($1/e_{0x}$), the crude death rate. The life table crude death rate derived as a reciprocal of expectation of life at birth, is a robust estimate, and said to represent the prevailing summary mortality conditions in Guyana. It is considered robust estimate, because more often direct estimate of crude death rate is said to suffer from inherent under-registration of deaths.

Appendix 1: Abridged Life Table Based on Deaths and Population Distribution for Guyana, MALES: 2004

Age interval	Age-specific central death rates	Probability of dying between exact ages x and x+n	Of 100,000 born alive		Stationary population		Average number of years of life remaining at beginning of age interval	Survival probabilities
			Number living at beginning of age interval	Number dying during age interval	In the age interval	In this and all subsequent age intervals		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
x	$_nm_x$	$_nq_x$	l_x	$_nd_x$	$_nL_x$	T_x	e^0_x	$5P_x$
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0	0.038203	0.037000	100,000	3,700	96,851	6,309,398	63.09	0.961594
1 - 4	0.001328	0.005295	96,300	510	383,946	6,212,547	64.51	0.995557
5 - 9	0.000242	0.001209	95,790	116	478,661	5,828,601	60.85	0.998135
10-14	0.000505	0.002522	95,674	241	477,768	5,349,940	55.92	0.994911
15-19	0.001746	0.008697	95,433	830	475,337	4,872,172	51.05	0.990156
20-24	0.002143	0.010662	94,603	1,009	470,658	4,396,835	46.48	0.985395
25-29	0.003901	0.019330	93,594	1,809	463,784	3,926,177	41.95	0.976731
30-34	0.005418	0.026740	91,785	2,454	452,992	3,462,393	37.72	0.971447
35-39	0.006111	0.030104	89,331	2,689	440,058	3,009,402	33.69	0.967596
40-44	0.007220	0.035483	86,642	3,074	425,798	2,569,344	29.65	0.958646
45-49	0.010104	0.049354	83,567	4,124	408,190	2,143,546	25.65	0.934587
50-54	0.017300	0.083075	79,443	6,600	381,489	1,735,356	21.84	0.908441
55-59	0.021080	0.100290	72,843	7,305	346,560	1,353,867	18.59	0.877714
60-64	0.031838	0.147770	65,538	9,685	304,181	1,007,307	15.37	0.834298
65-69	0.041064	0.186580	55,853	10,421	253,777	703,127	12.59	0.775548
70-74	0.062236	0.269612	45,432	12,249	196,816	449,350	9.89	0.694977
75-79	0.085327	0.351723	33,183	11,671	136,783	252,533	7.61	0.565221
80-84	0.148844	0.534938	21,512	11,508	77,313	115,751	5.38	0.332077
85+	0.260271	……	10,004	10,004	38,438	38,438	3.84	……

Note: Estimates based on registered deaths by age and sex, 2004 and Guyana's MICS 2006 Infant Mortality Rate of 37 deaths per 1000 was considered appropriate and assumed to prevail in 2004. MORTPAK was used in the estimation.

Appendix 2: Abridged Life Table Based on Deaths and Population Distribution for Guyana, FEMALES: 2004

Age interval	Age-specific central death rates	Probability of dying between exact ages x and x+n	Of 100,000 born alive		Stationary population		Average number of years of life remaining at beginning of age interval	Survival probabilities
			Number living at beginning of age interval	Number dying during age interval	In the age interval	In this and all subsequent age intervals		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
x	$_n m_x$	$_n q_x$	l_x	$_n d_x$	$_n L_x$	T_x	e^0_x	5Px
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0	0.038185	0.037000	100,000	3,700	96,896	6,831,904	68.32	0.962151
1 - 4	0.001047	0.004177	96,300	402	384,180	6,735,008	69.94	0.995659
5 - 9	0.000419	0.002093	95,898	201	478,987	6,350,829	66.22	0.997967
10-14	0.000395	0.001973	95,697	189	478,013	5,871,842	61.36	0.997114
15-19	0.000864	0.004312	95,508	412	476,634	5,393,828	56.48	0.993786
20-24	0.001655	0.008243	95,096	784	473,672	4,917,195	51.71	0.990299
25-29	0.002195	0.010917	94,313	1,030	469,077	4,443,523	47.11	0.988164
30-34	0.002554	0.012691	93,283	1,184	463,525	3,974,446	42.61	0.986394
35-39	0.002992	0.014854	92,099	1,368	457,218	3,510,921	38.12	0.982229
40-44	0.004345	0.021507	90,731	1,951	449,093	3,053,703	33.66	0.972755
45-49	0.006803	0.033475	88,780	2,972	436,857	2,604,610	29.34	0.962280
50-54	0.008714	0.042691	85,808	3,663	420,379	2,167,753	25.26	0.945682
55-59	0.014260	0.069012	82,145	5,669	397,545	1,747,373	21.27	0.910437
60-64	0.023326	0.110396	76,476	8,443	361,939	1,349,829	17.65	0.883776
65-69	0.026324	0.123768	68,033	8,420	319,873	987,889	14.52	0.837308
70-74	0.046782	0.210186	59,613	12,530	267,832	668,016	11.21	0.761192
75-79	0.063887	0.276634	47,083	13,025	203,872	400,184	8.50	0.628056
80-84	0.129016	0.485040	34,058	16,520	128,043	196,312	5.76	0.347757
85+	0.256905	……	17,539	17,539	68,269	68,269	3.89	……

Note: Estimates based on registered deaths by age and sex, 2004 and Guyana's MICS 2006 Infant Mortality Rate of 37 deaths per 1000 was considered appropriate and assumed to prevail in 2004. MORTPAK was used in the estimation.

Appendix 3: Abridged Life Table Based on Deaths and Population Distribution for Guyana, BOTH SEXES: 2004								
			Of 100,000 born alive		Stationary population			
Age interval	Age-specific central death rates	Probability of dying between exact ages x and x+n	Number living at beginning of age interval	Number dying during age interval	In the age interval	In this and all subsequent age intervals	Average number of years of life remaining at beginning of age interval	Survival probabilities
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
x	$_nm_x$	$_nq_x$	l_x	$_nd_x$	$_nL_x$	T_x	e^0_x	5Px
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
0	0.038185	0.037000	100,000	3,700	96,896	6,559,832	65.60	0.961873
1 - 4	0.001190	0.004746	96,300	457	384,041	6,462,936	67.11	0.995601
5 - 9	0.000329	0.001644	95,843	158	478,821	6,078,895	63.43	0.998052
10-14	0.000451	0.002252	95,685	215	477,888	5,600,074	58.53	0.996007
15-19	0.001306	0.006511	95,470	622	475,980	5,122,186	53.65	0.991967
20-24	0.001897	0.009443	94,848	896	472,157	4,646,206	48.99	0.987870
25-29	0.003040	0.015092	93,953	1,418	466,429	4,174,050	44.43	0.982439
30-34	0.003993	0.019774	92,535	1,830	458,238	3,707,620	40.07	0.978865
35-39	0.004557	0.022535	90,705	2,044	448,553	3,249,382	35.82	0.974849
40-44	0.005789	0.028551	88,661	2,531	437,272	2,800,829	31.59	0.965669
45-49	0.008459	0.041471	86,130	3,572	422,260	2,363,557	27.44	0.948190
50-54	0.013051	0.063294	82,558	5,225	400,383	1,941,297	23.51	0.926782
55-59	0.017641	0.084648	77,332	6,546	371,068	1,540,914	19.93	0.894383
60-64	0.027409	0.128505	70,786	9,096	331,876	1,169,846	16.53	0.859824
65-69	0.033328	0.154163	61,690	9,510	285,355	837,970	13.58	0.807650
70-74	0.053961	0.238335	52,180	12,436	230,467	552,615	10.59	0.729837
75-79	0.073755	0.312149	39,743	12,406	168,204	322,147	8.11	0.599749
80-84	0.136979	0.505475	27,338	13,818	100,880	153,944	5.63	0.344697
85+	0.254770	……	13,519	13,519	53,064	53,064	3.93	……

Note: Estimates based on registered deaths by age and sex, 2004 and Guyana's MICS 2006 Infant Mortality Rate of 37 deaths per 1000 was considered appropriate and assumed to prevail in 2004. MORTPAK was used in the estimation.

APPENDIX 4: UNABRIDGED LIFE TABLES FOR GUYANA MALE POPULATION: 2004

Age	$_nM_x$	$_nQ_x$	I_x	e_{0x}		Age	$_nM_x$	$_nQ_x$	I_x	e_{0x}		Age	$_nM_x$	$_nQ_x$	I_x	e_{0x}
(1)	(2)	(3)	(4)	(5)		(1)	(2)	(3)	(4)	(5)		(1)	(2)	(3)	(4)	(5)
0	0.03801	0.03702	100,000	63.54		34	0.00545	0.00544	90,178	34.84		68	0.04569	0.04467	51,654	10.86
1	0.00380	0.00379	96,298	64.98		35	0.00572	0.00570	89,688	34.02		69	0.04954	0.04834	49,346	10.34
2	0.00090	0.00090	95,933	64.22		36	0.00599	0.00597	89,177	33.22		70	0.05372	0.05232	46,961	9.84
3	0.00036	0.00036	95,847	63.28		37	0.00627	0.00625	88,645	32.41		71	0.05828	0.05663	44,504	9.36
4	0.00024	0.00024	95,812	62.3		38	0.00657	0.00655	88,090	31.61		72	0.06323	0.06130	41,984	8.89
5	0.00021	0.00021	95,789	61.32		39	0.00688	0.00686	87,514	30.82		73	0.06862	0.06634	39,410	8.44
6	0.00021	0.00021	95,769	60.33		40	0.00721	0.00718	86,914	30.03		74	0.07447	0.07179	36,796	8
7	0.00023	0.00023	95,749	59.34		41	0.00756	0.00753	86,289	29.24		75	0.08082	0.07768	34,154	7.58
8	0.00026	0.00026	95,728	58.35		42	0.00793	0.00790	85,640	28.46		76	0.08771	0.08402	31,501	7.18
9	0.00030	0.00030	95,703	57.37		43	0.00834	0.00830	84,963	27.68		77	0.09518	0.09085	28,854	6.79
10	0.00035	0.00035	95,675	56.39		44	0.00877	0.00873	84,258	26.91		78	0.10327	0.09820	26,233	6.42
11	0.00043	0.00043	95,641	55.41		45	0.00924	0.00920	83,522	26.14		79	0.11203	0.10609	23,657	6.07
12	0.00052	0.00052	95,600	54.43		46	0.00975	0.00970	82,754	25.38		80	0.12150	0.11454	21,147	5.73
13	0.00064	0.00064	95,550	53.46		47	0.01030	0.01025	81,951	24.62		81	0.13174	0.12360	18,725	5.4
14	0.00078	0.00077	95,489	52.49		48	0.01091	0.01085	81,111	23.87		82	0.14280	0.13328	16,410	5.09
15	0.00093	0.00093	95,415	51.53		49	0.01156	0.01150	80,231	23.13		83	0.15472	0.14361	14,223	4.8
16	0.00111	0.00111	95,326	50.58		50	0.01228	0.01221	79,308	22.39		84	0.16757	0.15461	12,181	4.52
17	0.00130	0.00130	95,221	49.63		51	0.01307	0.01298	78,340	21.66		85	0.18139	0.16631	10,297	4.26
18	0.00151	0.00151	95,097	48.7		52	0.01393	0.01383	77,323	20.94		86	0.19625	0.17871	8,585	4.01
19	0.00173	0.00172	94,954	47.77		53	0.01486	0.01475	76,254	20.23		87	0.21220	0.19184	7,051	3.77
20	0.00196	0.00195	94,790	46.85		54	0.01589	0.01577	75,129	19.52		88	0.22929	0.20571	5,698	3.55
21	0.00219	0.00219	94,605	45.94		55	0.01701	0.01687	73,944	18.83		89	0.24758	0.22031	4,526	3.34
22	0.00244	0.00243	94,398	45.04		56	0.01824	0.01808	72,697	18.14		90	0.26713	0.23565	3,529	3.14
23	0.00268	0.00268	94,168	44.15		57	0.01959	0.01940	71,383	17.47		91	0.28798	0.25173	2,697	2.95
24	0.00293	0.00293	93,915	43.27		58	0.02106	0.02084	69,998	16.8		92	0.31017	0.26853	2,018	2.78
25	0.00318	0.00318	93,640	42.4		59	0.02266	0.02241	68,540	16.15		93	0.33376	0.28602	1,476	2.61
26	0.00344	0.00343	93,343	41.53		60	0.02442	0.02412	67,004	15.51		94	0.35876	0.30420	1,054	2.46
27	0.00369	0.00368	93,022	40.67		61	0.02634	0.02600	65,387	14.88		95	0.38522	0.32300	733	2.31
28	0.00394	0.00393	92,680	39.82		62	0.02843	0.02804	63,688	14.26		96	0.41314	0.34241	497	2.18
29	0.00419	0.00418	92,316	38.97		63	0.03072	0.03026	61,902	13.66		97	0.44255	0.36237	326	2.05
30	0.00443	0.00442	91,931	38.14		64	0.03322	0.03268	60,029	13.07		98	0.47343	0.38281	208	1.94
31	0.00468	0.00467	91,524	37.3		65	0.03595	0.03531	58,067	12.5		99	0.50578	0.40369	128	1.83
32	0.00494	0.00492	91,096	36.48		66	0.03892	0.03818	56,017	11.94		100	0.57950	1.00000	77	1.73
33	0.00519	0.00518	90,648	35.65		67	0.04216	0.04129	53,878	11.39						

Note: Minor difference in life expectancy (e_{0x}) may be due to rounding.

APPENDIX 5: UNABRIDGED LIFE TABLES FOR GUYANA FEMALE POPULATION: 2004															
Age	$_nM_x$	$_nQ_x$	I_x	e_{0x}		Age	$_nM_x$	$_nQ_x$	I_x	e_{0x}		Age	$_nM_x$	$_nQ_x$	I_x	e_{0x}
(1)	(2)	(3)	(4)	(5)		(1)	(2)	(3)	(4)	(5)		(1)	(2)	(3)	(4)	(5)
0	0.03798	0.03700	100,000	68.74		34	0.00267	0.00267	92,344	39.47		68	0.03382	0.03326	63,516	12.96
1	0.00199	0.00199	96,300	70.37		35	0.00277	0.00277	92,097	38.58		69	0.03670	0.03604	61,404	12.39
2	0.00101	0.00101	96,109	69.51		36	0.00289	0.00289	91,842	37.68		70	0.03982	0.03904	59,191	11.83
3	0.00069	0.00069	96,012	68.58		37	0.00303	0.00303	91,577	36.79		71	0.04320	0.04229	56,880	11.29
4	0.00054	0.00053	95,946	67.63		38	0.00320	0.00320	91,300	35.9		72	0.04687	0.04579	54,474	10.77
5	0.00045	0.00045	95,895	66.67		39	0.00339	0.00339	91,008	35.02		73	0.05083	0.04957	51,980	10.26
6	0.00041	0.00041	95,851	65.7		40	0.00361	0.00361	90,700	34.13		74	0.05512	0.05364	49,403	9.77
7	0.00038	0.00038	95,812	64.72		41	0.00386	0.00385	90,373	33.25		75	0.05976	0.05803	46,753	9.3
8	0.00037	0.00037	95,775	63.75		42	0.00414	0.00413	90,024	32.38		76	0.06478	0.06275	44,040	8.84
9	0.00037	0.00037	95,739	62.77		43	0.00445	0.00444	89,653	31.51		77	0.07021	0.06783	41,277	8.4
10	0.00038	0.00038	95,704	61.79		44	0.00479	0.00478	89,255	30.65		78	0.07607	0.07328	38,477	7.97
11	0.00039	0.00039	95,668	60.82		45	0.00517	0.00516	88,828	29.8		79	0.08240	0.07914	35,657	7.56
12	0.00041	0.00041	95,631	59.84		46	0.00559	0.00558	88,369	28.95		80	0.08923	0.08542	32,836	7.17
13	0.00045	0.00045	95,591	58.86		47	0.00605	0.00603	87,877	28.11		81	0.09660	0.09215	30,031	6.79
14	0.00050	0.00050	95,548	57.89		48	0.00656	0.00653	87,346	27.28		82	0.10455	0.09936	27,263	6.43
15	0.00058	0.00058	95,500	56.92		49	0.00711	0.00708	86,776	26.45		83	0.11311	0.10706	24,554	6.08
16	0.00069	0.00069	95,445	55.95		50	0.00771	0.00768	86,161	25.64		84	0.12233	0.11528	21,926	5.75
17	0.00082	0.00082	95,379	54.99		51	0.00836	0.00832	85,500	24.83		85	0.13225	0.12405	19,398	5.44
18	0.00097	0.00097	95,301	54.03		52	0.00907	0.00903	84,788	24.04		86	0.14291	0.13338	16,992	5.14
19	0.00114	0.00114	95,208	53.09		53	0.00985	0.00980	84,022	23.25		87	0.15436	0.14330	14,726	4.85
20	0.00132	0.00132	95,099	52.15		54	0.01069	0.01063	83,199	22.48		88	0.16664	0.15382	12,615	4.58
21	0.00150	0.00150	94,974	51.22		55	0.01161	0.01154	82,314	21.71		89	0.17980	0.16497	10,675	4.32
22	0.00167	0.00167	94,831	50.29		56	0.01260	0.01253	81,364	20.96		90	0.19390	0.17676	8,914	4.08
23	0.00183	0.00182	94,672	49.38		57	0.01369	0.01359	80,345	20.22		91	0.20897	0.18920	7,338	3.85
24	0.00196	0.00196	94,500	48.46		58	0.01486	0.01475	79,253	19.49		92	0.22507	0.20230	5,950	3.63
25	0.00207	0.00207	94,315	47.56		59	0.01614	0.01601	78,084	18.78		93	0.24224	0.21607	4,746	3.42
26	0.00217	0.00216	94,119	46.66		60	0.01753	0.01737	76,833	18.07		94	0.26053	0.23050	3,721	3.22
27	0.00224	0.00224	93,916	45.76		61	0.01903	0.01885	75,498	17.38		95	0.27998	0.24559	2,863	3.04
28	0.00230	0.00230	93,705	44.86		62	0.02067	0.02045	74,075	16.71		96	0.30063	0.26134	2,160	2.87
29	0.00236	0.00236	93,490	43.96		63	0.02244	0.02219	72,560	16.05		97	0.32251	0.27773	1,595	2.7
30	0.00241	0.00241	93,270	43.06		64	0.02436	0.02407	70,950	15.4		98	0.34567	0.29473	1,152	2.55
31	0.00246	0.00246	93,045	42.17		65	0.02645	0.02610	69,242	14.77		99	0.37012	0.31232	813	2.41
32	0.00252	0.00252	92,817	41.27		66	0.02871	0.02830	67,435	14.15		100	0.44048	1.00000	559	2.27
33	0.00259	0.00259	92,583	40.37		67	0.03116	0.03068	65,526	13.55						

Note: Minor difference in life expectancy (e_{0x}) may be due to rounding.

APPENDIX 6: UNABRIDGED LIFE TABLES FOR GUYANA BOTH SEXES COMBINED POPULATION: 2004															
Age	$_nM_x$	$_nQ_x$	I_x	e_{0x}		Age	$_nM_x$	$_nQ_x$	I_x	e_{0x}		Age	$_nM_x$	$_nQ_x$	I_x	e_{0x}
(1)	(2)	(3)	(4)	(5)		(1)	(2)	(3)	(4)	(5)		(1)	(2)	(3)	(4)	(5)
0	0.03798	0.03700	100,000	65.89		34	0.00417	0.00416	91,184	36.94		68	0.04010	0.03931	57,127	11.79
1	0.00275	0.00274	96,300	67.41		35	0.00435	0.00434	90,804	36.09		69	0.04348	0.04256	54,881	11.25
2	0.00103	0.00103	96,036	66.59		36	0.00454	0.00453	90,411	35.25		70	0.04715	0.04606	52,546	10.73
3	0.00058	0.00058	95,937	65.66		37	0.00474	0.00473	90,001	34.4		71	0.05112	0.04985	50,125	10.22
4	0.00041	0.00041	95,882	64.7		38	0.00495	0.00494	89,576	33.57		72	0.05542	0.05393	47,627	9.73
5	0.00034	0.00034	95,842	63.72		39	0.00519	0.00518	89,133	32.73		73	0.06008	0.05833	45,059	9.26
6	0.00031	0.00031	95,809	62.75		40	0.00545	0.00543	88,672	31.9		74	0.06512	0.06307	42,430	8.8
7	0.00031	0.00031	95,779	61.77		41	0.00573	0.00571	88,190	31.07		75	0.07058	0.06817	39,754	8.36
8	0.00031	0.00031	95,750	60.78		42	0.00603	0.00602	87,687	30.24		76	0.07648	0.07366	37,044	7.94
9	0.00033	0.00033	95,720	59.8		43	0.00637	0.00635	87,159	29.42		77	0.08285	0.07956	34,315	7.53
10	0.00036	0.00036	95,688	58.82		44	0.00675	0.00672	86,605	28.61		78	0.08974	0.08588	31,585	7.13
11	0.00041	0.00041	95,653	57.84		45	0.00716	0.00713	86,023	27.8		79	0.09717	0.09267	28,873	6.76
12	0.00047	0.00047	95,614	56.87		46	0.00761	0.00758	85,409	27		80	0.10519	0.09993	26,197	6.4
13	0.00056	0.00056	95,569	55.89		47	0.00811	0.00808	84,762	26.2		81	0.11383	0.10770	23,579	6.05
14	0.00066	0.00066	95,516	54.93		48	0.00866	0.00862	84,077	25.41		82	0.12314	0.11599	21,040	5.72
15	0.00079	0.00079	95,452	53.96		49	0.00926	0.00922	83,352	24.62		83	0.13315	0.12484	18,599	5.41
16	0.00093	0.00093	95,377	53		50	0.00992	0.00987	82,584	23.85		84	0.14393	0.13426	16,277	5.11
17	0.00109	0.00109	95,289	52.05		51	0.01064	0.01059	81,769	23.08		85	0.15550	0.14428	14,092	4.82
18	0.00127	0.00127	95,185	51.11		52	0.01144	0.01137	80,903	22.32		86	0.16792	0.15492	12,059	4.55
19	0.00146	0.00146	95,064	50.17		53	0.01231	0.01223	79,983	21.57		87	0.18124	0.16618	10,191	4.29
20	0.00165	0.00165	94,926	49.25		54	0.01326	0.01317	79,004	20.84		88	0.19551	0.17810	8,497	4.05
21	0.00185	0.00185	94,769	48.33		55	0.01430	0.01419	77,964	20.11		89	0.21076	0.19067	6,984	3.82
22	0.00205	0.00205	94,594	47.41		56	0.01543	0.01531	76,857	19.39		90	0.22707	0.20391	5,652	3.6
23	0.00225	0.00225	94,400	46.51		57	0.01667	0.01653	75,680	18.68		91	0.24446	0.21783	4,500	3.39
24	0.00245	0.00244	94,188	45.61		58	0.01802	0.01786	74,429	17.99		92	0.26298	0.23242	3,519	3.2
25	0.00264	0.00263	93,958	44.73		59	0.01949	0.01930	73,100	17.31		93	0.28269	0.24768	2,701	3.01
26	0.00282	0.00282	93,710	43.84		60	0.02109	0.02087	71,690	16.64		94	0.30361	0.26360	2,032	2.84
27	0.00300	0.00299	93,447	42.96		61	0.02283	0.02257	70,193	15.98		95	0.32579	0.28016	1,497	2.68
28	0.00317	0.00317	93,167	42.09		62	0.02473	0.02443	68,609	15.34		96	0.34926	0.29734	1,077	2.53
29	0.00334	0.00333	92,872	41.22		63	0.02679	0.02644	66,933	14.71		97	0.37405	0.31511	757	2.38
30	0.00350	0.00350	92,562	40.36		64	0.02903	0.02862	65,163	14.1		98	0.40016	0.33344	518	2.25
31	0.00367	0.00366	92,238	39.5		65	0.03147	0.03098	63,299	13.5		99	0.42762	0.35230	346	2.12
32	0.00383	0.00382	91,901	38.64		66	0.03411	0.03354	61,337	12.91		100	0.49857	1.00000	224	2.01
33	0.00400	0.00399	91,549	37.79		67	0.03699	0.03631	59,280	12.34						

Note: Minor difference in life expectancy (e_{0x}) may be due to rounding.