

iodine groups using the linear, log transformed, and arcsine transformed formulas.

(f) Find 95% HW confidence bands for the infection-free functions over the range 8–20 days postinfection for both the chlorhexidine and povidone-iodine.

(g) Based on the results above, how does the infection experience of the chlorhexidine and povidone-iodine groups compare?

4.7 Consider a hypothetical study of the mortality experience of diabetics. Thirty diabetic subjects are recruited at a clinic and followed until death or the end of the study. The subject's age at entry into the study and their age at the end of study or death are given in the table below. Of interest is estimating the survival curve for a 60- or for a 70-year-old diabetic.

(a) Since the diabetics needed to survive long enough from birth until the study began, the data is left truncated. Construct a table showing the number of subjects at risk, Y , as a function of age.

(b) Estimate the conditional survival function for the age of death of a diabetic patient who has survived to age 60.

(c) Estimate the conditional survival function for the age of death of a diabetic patient who has survived to age 70.

(d) Suppose an investigator incorrectly ignored the left truncation and simply treated the data as right censored. Repeat parts a–c.

<i>Entry Age</i>	<i>Exit Age</i>	<i>Death Indicator</i>	<i>Entry Age</i>	<i>Exit Age</i>	<i>Death Indicator</i>
58	60	1	67	70	1
58	63	1	67	77	1
59	69	0	67	69	1
60	62	1	68	72	1
60	65	1	69	79	0
61	72	0	69	72	1
61	69	0	69	70	1
62	73	0	70	76	0
62	66	1	70	71	1
62	65	1	70	78	0
63	68	1	71	79	0
63	74	0	72	76	1
64	71	1	72	73	1
66	68	1	73	80	0
66	69	1	73	74	1

4.8 Table 1.7 reports the results of a study on the survival times of patients admitted to a psychiatric hospital. In this data set patients were admitted to the hospital at a random age and followed until death or the end of the study. Let X be the patient's age at death. Note that the data we