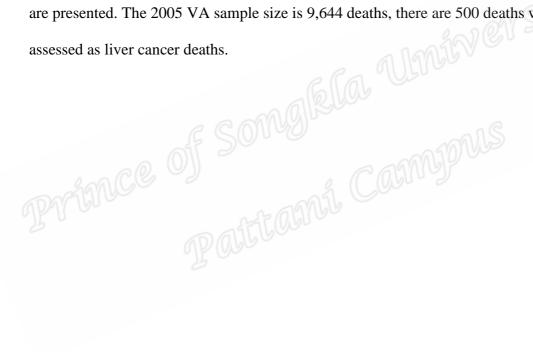
Chapter 3

Preliminary Data Analysis

In this chapter we report the VA assessed deaths and the number of deaths in major cause groups. These major cause groups between the VA assessed deaths and the VR reported deaths were cross classification. Liver cancer death outcome (1=liver cancer, 0=other causes) associated with province, gender age-group and VR cause location are presented. The 2005 VA sample size is 9,644 deaths, there are 500 deaths were assessed as liver cancer deaths.



3.1 Association between VA and VR cause groups

From 500 VA liver cancer deaths, most likely VR cause groups are liver cancer (05:liver cancer) 236 deaths, other digestive cancer (07:othDigCa) 39 deaths, other cancer (08:otherCa) 48 deaths, digestive (15:digestive) 49 deaths, ill defined or septicemia (18:illDef, 02:septicemia) 99 deaths, and other causes 29 deaths. Other causes comprise 04:othInfDis, 06:lungCa+, 09:endocrine, 11:IHD, 13:otherCVD, 14:resp, 16:genitoUrin and 22:allOther. For the numbers of deaths for liver cancer together with other 21 cause groups are shown as bubble plots in Figure 3.1.

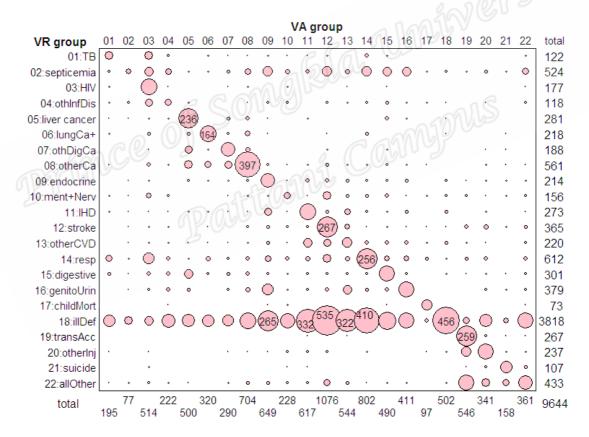


Figure 3.1: Association between VA and VR cause groups

3.2 Associations between outcome and determinants

The total deaths and number of liver cancer deaths in the 2005 VA sample classified by province and gender are shown in Table 3.1.

Table 3.1: Number of liver cancer deaths in nine provinces

province	number of deaths		liver cancer deaths		liver cancer deaths	
	male	female	male	female	yes	no
Bangkok	486	386	27	4	31	841
Nakhon Nayok	362	285	15	2	17	630
Ubon Ratchathani	1,374	1,044	148	82	230	2,188
Loei	516	361	33	16	49	828
Phayao	337	254	23	24	47	544
Chiang Rai	838	611	49	17	66	1,383
Suphan Buri	883	744	19	11	30	1,597
Chumphon	181	135	5	3	8	308
Songkhla	497	350	17	5	22	825
Total	9,644		500		9,644	

The total deaths and number of liver cancer deaths in the 2005 VA sample classified by age-groups and gender are shown in Table 3.2.

Table 3.2: Number of total deaths and liver cancer deaths by gender and age-groups

age	number	of deaths	liver cancer deaths	
	male	female	male	female
0-29	585	0	5	0
30-39	560	478	11	4
40-49	615	291	50	21
50-59	710	420	85	33
60-69	957	684	95	50
70-79	1,139	1,034	64	33
80+	908	1,263	26	23
Total	9,6	544	500	

The total deaths and number of liver cancer deaths in the 2005 VA sample classified by VR reported cause location groups are shown in Table 3.3.

Table 3.3: Number of total deaths and liver caner deaths by VR cause location groups

VR reported cause	Number of	deaths	Liver cancer deaths		
group	In hospital	Outside hospital	In hospital	Outside hospital	
Liver cancer	68	213	58	178	
Other digestive cancer	84	104	13	26	
Other cancer	161	400	1	47	
Digestive	162	139	3	46	
Ill-defined+septicemia	917	3,425	8	91	
Other cause	1,924	2,047	2	27	
Total	3,316	6,328	85	415	

Figure 3.2 shows associations between outcome and determinants. More than 80% (236/281) of reported liver cancer deaths were really due to liver cancer. But among deaths outside hospital, 33% of those reported as digestive disease and 25% of those reported as other digestive cancer deaths were really due to liver cancer. Only 236 of 500 liver cancer deaths were correctly reported.

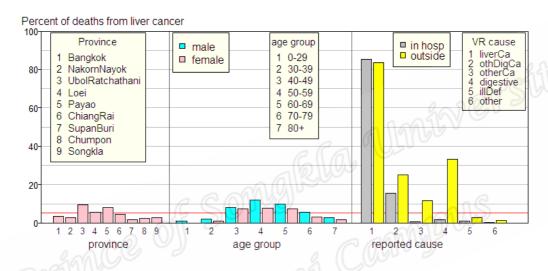


Figure 3.2: Association between outcome and determinants