

LOG-LINEAR MODEL

➤ Analysis of Data

< > table 1980 Dawber data , Framingham County
 1948 9
 , 1951 8

CHD					
		- 126	127 - 146	147 - 166	167 -
	- 199	2	3	3	4
	200 - 219	3	2	0	3
	220 - 259	8	11	6	6
	260 -	7	12	11	11
	- 199	117	121	47	22
	200 - 219	85	98	43	20
	220 - 259	119	209	68	43
	260 -	67	99	46	33

1. data cohort 가 < Cox 1984 >
 fixed cohort 가
 ,
 complete observation 가 fixed
 cohort < Yoo et al. 1991 >
2. fixed cohort data ' Binary distribution ' 가
 Linear Logistic Regression Model Mantel-Haenszel chi-square
 .
 Binary distribution
 Poisson distribution
 Linear Logistic Regression Model < Holford 1980 ; Aitkin et al.
 1990 ; 1996 >

3. Linear Logistic Regression Model

가 model
 Log-Linear Model < 1996 >, Log-Linear Model
 Logistic Model 가
 modeling Categorical data

4. Log-Linear Model GLIM

program PC-SAS PROC CATMOD
 . Log-Linear Model Linear Logistic Model ,
 Linear Logistic Model Log-Linear Model .
 model 가 Linear Logistic Model observed values
 Log-Linear Model expected values

< > data fixed cohort
 Log-Linear Model

가?
 complete observation

		Estimate	Odds ratio
	- 126	Reference	
	127 - 146	-0.041	0.959
	147 - 166	0.532	1.703
	167 -	1.200	3.320
	- 199	Reference	
	200 - 219	-0.208	0.812
	220 - 259	0.562	1.755
	260 -	1.344	3.834

126mmHg , 127-146mmHg
exp(-0.041) 0.959 147-166mmHg
1.706 , 167mmHg 3.320
가 . 가
cohort