

Table 9.7 Abuse of antibiotics. Estimates for multilevel random intercept multinomial logistic regression. Including observed covariates at the doctor and hospital levels.

	Abuse one vs. none				Abuse several vs. none			
	Est	SE	P	95% CI	Est	SE	P	95% CI
Fixed Effects								
Child-level								
g_0^a CONS	0.12	0.49	0.81	(-0.85, 1.09)	1.02	0.70	0.15	(-0.35, 2.39)
g_1^a AGE	0.17	0.08	0.02	(0.02, 0.33)	0.07	0.09	0.43	(-0.11, 0.25)
g_2^a TEMP	-0.96	0.12	<0.001	(-1.19, -0.73)	-0.27	0.13	0.04	(-0.52, -0.01)
g_3^a PAYMED	0.12	0.32	0.71	(-0.50, 0.74)	0.92	0.40	0.02	(0.14, 1.71)
g_4^a SELFMED	-0.49	0.24	0.04	(-0.95, -0.02)	-0.86	0.29	<0.001	(-1.42, -0.29)
g_5^a WRDIAG	2.08	0.23	<0.001	(1.62, 2.43)	1.85	0.26	<0.001	(1.34, 2.36)
Doctor-level								
g_6^a DRED	0.08	0.11	0.48	(-0.13, 0.28)	-0.62	0.17	<0.001	(-0.95, -0.29)
Hospital-level								
g_7^a WHO	-0.88	0.33	0.01	(-1.52, -0.23)	-2.40	0.62	<0.001	(-3.60, -1.19)
Random Effects								
Doctor-level								
$Var(\gamma_0^{a(2)})$	0.43	0.22			0.45	0.28		
$Cov(\gamma_0^{2(2)}, \gamma_0^{3(2)})$	-0.44	0.13						
Hospital-level								
$Var(\gamma_0^{a(3)})$	0.11	0.11			0.87	0.45		
$Cov(\gamma_0^{2(3)}, \gamma_0^{3(3)})$	0.30	0.20						
Log-likelihood				-716.17				