

Supplemental Table 1. Unadjusted associations between psychological factors and quality of life - psychological factors are included in the model one at a time

	Physical			Psychological			Social			Environment		
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	Estimate	StdErr	P-value	Estimate	StdErr	P-value
score depression	-0.21	0.02	<.0001	-0.22	0.02	<.0001	-0.13	0.01	<.0001	-0.36	0.03	<.0001
score Anxiety	-0.15	0.02	<.0001	-0.14	0.02	<.0001	-0.09	0.01	<.0001	-0.30	0.03	<.0001
score Disclosure1_ Responsibility	-0.10	0.20	0.6174	-0.20	0.20	0.2967	-0.14	0.13	0.2515	-0.32	0.33	0.3253
score Disclosure2_ Instruction	-0.07	0.19	0.6969	-0.08	0.18	0.6569	-0.07	0.12	0.5586	-0.30	0.31	0.3273
score Disclosure3_ Relationship Consequences	-0.29	0.12	0.0178	-0.28	0.11	0.0154	-0.11	0.07	0.1276	-0.30	0.20	0.0076
score Disclosure4_ Emotional Release	-0.24	0.18	0.1933	-0.43	0.17	0.0133	-0.25	0.11	0.0222	-0.62	0.29	0.0349
score Non-Disclosure	-0.04	0.06	0.5452	-0.003	-0.06	0.9550	-0.03	0.04	0.3625	-0.07	0.1	0.4724
score Stigma	-0.24	0.09	0.0061	-0.25	0.08	0.0048	-0.18	0.06	0.0012	-0.40	0.14	0.0062

Supplemental Table 2. Unadjusted associations between psychological factors and quality of life - psychological factors are included in the model simultaneously

Parameter	Physical			Psychological			Social			Environment		
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	Estimate	StdErr	P-value	Estimate	StdErr	P-value
score_depression	-0.18	0.02	<.0001	-0.20	0.02	<.0001	-0.11	0.01	<.0001	-0.27	0.04	<.0001
score_anxiety	-0.04	0.02	0.0903	-0.023	0.02	0.3415	-0.02	0.01	0.1310	-0.14	0.04	0.0006
score_disclosure_1	0.10	0.24	0.6701	0.00	0.22	0.9877	-0.06	0.15	0.6831	0.16	0.38	0.6622
score_disclosure_2	0.08	0.22	0.7124	0.21	0.21	0.3013	0.09	0.14	0.5092	0.02	0.35	0.9484
score_disclosure_3	-0.15	0.12	0.2284	-0.10	0.11	0.3802	0.03	0.07	0.7153	-0.21	0.19	0.2753
score_disclosure_4	-0.04	0.19	0.8448	-0.26	0.18	0.1417	-0.15	0.12	0.2082	-0.26	0.30	0.3829
score_non disclosure	-0.00	0.06	0.9998	0.04	0.07	0.4685	-0.01	0.04	0.6891	-0.00	0.10	0.9618
score_stigma	-0.14	0.08	0.0993	-0.13	0.08	0.0871	-0.10	0.05	0.0450	-0.19	0.13-	0.1513

Supplemental Table 3. Associations between psychological factors and quality of life - psychological factors by years of diagnosis

(a) Physical

	Years of Diagnose						Interaction P-value
	≤ 9 years			> 9 years			
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	
score_depression	-0.19	0.03	<0.0001	-0.20	0.03	<0.0001	0.6521
score_anxiety	-0.12	0.03	0.0001	-0.21	0.04	<0.0001	0.4471
score_disclosure_1	-0.51	0.23	0.0646	0.37	0.30	0.2209	0.0132
score_disclosure_2	-0.42	0.26	0.1036	0.35	0.29	0.2223	0.0208
score_disclosure_3	-0.33	0.14	0.0187	-0.18	0.25	0.4795	0.6287
score_disclosure_4	-0.58	0.24	0.0185	0.17	0.27	0.5449	0.0591
score_non disclosure	-0.009	0.09	0.9186	-0.07	0.09	0.4463	0.1723
score_stigma	-0.33	0.12	0.0078	-0.16	0.13	0.2301	0.0366

Adjusting for age, sex, education (college and above vs. high school vs. middle school and below), medical insurance, liver cirrhosis, other chronic disease, and stage

(b) Psychological

	Years of Diagnose						Interaction P-value
	≤ 9 years			> 9 years			
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	
score_depression	-0.20	0.03	<0.0001	-0.25	0.03	<0.0001	0.3770
score_anxiety	-0.11	0.03	0.0002	-0.18	0.03	<0.0001	0.5919
score_disclosure_1	-0.50	0.28	0.0737	0.14	0.28	0.6122	0.0979
score_disclosure_2	-0.35	0.26	0.1750	0.25	0.27	0.3490	0.0410
score_disclosure_3	-0.30	0.14	0.0311	-0.22	0.23	0.3346	0.8043
score_disclosure_4	-0.73	0.24	0.0026	-0.06	0.25	0.8077	0.0866
score_non disclosure	0.02	0.09	0.8681	-0.02	0.09	0.7968	0.1699
score_stigma	-0.32	0.12	0.0091	-0.16	0.12	0.1819	0.0438

Adjusting for age, sex, education (college and above vs. high school vs. middle school and below), medical insurance, liver cirrhosis, other chronic disease, and stage

(c) Social

	Years of Diagnose						Interaction P-value
	≤ 9 years			> 9 years			
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	
score_depression	-0.12	0.02	<0.0001	-0.14	0.02	<0.0001	0.6266
score_anxiety	-0.07	0.02	0.0007	-0.12	0.02	<0.0001	0.5078
score_disclosure_1	-0.44	0.19	0.0187	0.22	0.17	0.2033	0.0383
score_disclosure_2	-0.30	0.17	0.0877	0.21	0.16	0.1903	0.0346
score_disclosure_3	-0.15	0.10	0.1208	0.02	0.14	0.8734	0.8745
score_disclosure_4	-0.48	0.16	0.0039	0.03	0.15	0.8236	0.0211
score_non disclosure	0.01	0.06	0.8326	-0.09	0.05	0.0960	0.0611
score_stigma	-0.23	0.08	0.0056	-0.13	0.07	0.0801	0.2282

Adjusting for age, sex, education (college and above vs. high school vs. middle school and below), medical insurance, liver cirrhosis, other chronic disease, and stage

(d) Environment

	Years of Diagnose						Interaction P-value
	≤ 9 years			> 9 years			
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	
score_depression	-0.34	0.05	<0.0001	-0.39	0.04	<0.0001	0.6105
score_anxiety	-0.25	0.05	<0.0001	-0.39	0.05	<0.0001	0.2520
score_disclosure_1	-1.12	0.48	0.0197	0.64	0.45	0.1610	0.0100
score_disclosure_2	-0.98	0.44	0.0267	0.54	0.43	0.2104	0.0079
score_disclosure_3	-0.62	0.24	0.0108	-0.19	0.38	0.6198	0.8242
score_disclosure_4	-1.17	0.41	0.0005	0.45	0.41	0.2677	0.0004
score_non disclosure	-0.01	0.16	0.9369	-0.14	0.14	0.3520	0.0778
score_stigma	-0.50	0.21	0.0201	-0.30	0.20	0.1328	0.1504

Adjusting for age, sex, education (college and above vs. high school vs. middle school and below), medical insurance, liver cirrhosis, other chronic disease, and stage

Supplemental Table 4. Associations between psychological factors and quality of life - psychological factors by comorbidities

(a) Physical

	Comorbidities						Interaction P-value
	No			Yes			
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	
score_depression	-0.23	0.03	<0.0001	-0.17	0.04	<0.0001	0.3432
score_anxiety	-0.16	0.03	<0.0001	-0.12	0.04	0.0040	0.3681
score_disclosure_1	-0.05	0.24	0.8221	-0.17	0.40	0.6770	0.7023
score_disclosure_2	0.11	0.22	0.6233	-0.54	0.38	0.1559	0.1183
score_disclosure_3	-0.27	0.13	0.0361	-0.40	0.35	0.2585	0.5809
score_disclosure_4	0.09	0.21	0.6546	-0.86	0.36	0.0187	0.0801
score_non disclosure	-0.05	0.07	0.4815	-0.05	0.13	0.6889	0.5436
score_stigma	-0.29	0.10	0.0056	-0.10	0.19	0.6040	0.4085

Adjusting for age, sex, education (college and above vs. high school vs. middle school and below), medical insurance, liver cirrhosis, stage, and years of diagnose

(b) Psychological

	Comorbidities						Interaction P-value
	No			Yes			
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	
score_depression	-0.23	0.02	<0.0001	-0.20	0.04	<0.0001	0.7528
score_anxiety	-0.15	0.03	<0.0001	-0.10	0.04	0.0173	0.2369
score_disclosure_1	-0.03	0.22	0.8791	-0.56	0.39	0.1624	0.2523
score_disclosure_2	0.17	0.21	0.4070	-0.72	0.37	0.0563	0.0408
score_disclosure_3	-0.23	0.12	0.0616	-0.62	0.35	0.0772	0.1663
score_disclosure_4	-0.10	0.20	0.6197	-1.07	0.35	0.0031	0.0647
score_non disclosure	-0.004	0.07	0.9573	-0.05	0.13	0.7150	0.8965
score_stigma	-0.28	0.10	0.0046	-0.11	0.19	0.5542	0.3216

Adjusting for age, sex, education (college and above vs. high school vs. middle school and below), medical insurance, liver cirrhosis, stage, and years of diagnose

(c) Social

	Comorbidities						Interaction P-value
	No			Yes			
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	
score_depression	-0.13	0.02	<0.0001	-0.13	0.03	<0.0001	0.9782
score_anxiety	-0.09	0.02	<0.0001	-0.08	0.03	<0.0001	0.6750
score_disclosure_1	0.02	0.14	0.9042	-0.50	0.27	0.0626	0.0400
score_disclosure_2	0.05	0.13	0.6991	-0.38	0.26	0.1365	0.1400
score_disclosure_3	-0.07	0.08	0.3787	-0.39	0.24	0.0985	0.0953
score_disclosure_4	-0.02	0.13	0.8929	-0.71	0.24	0.0037	0.0178
score_non disclosure	-0.02	0.04	0.5804	-0.11	0.09	0.2415	0.6164
score_stigma	-0.19	0.06	0.0028	-0.14	0.12	0.2736	0.6620

Adjusting for age, sex, education (college and above vs. high school vs. middle school and below), medical insurance, liver cirrhosis, stage, and years of diagnose

(d) Environment

	Comorbidities						Interaction P-value
	No			Yes			
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	
score_depression	-0.37	0.04	<0.0001	-0.33	0.07	<0.0001	0.7535
score_anxiety	-0.31	0.04	<0.0001	-0.27	0.07	0.0003	0.4362
score_disclosure_1	-0.05	0.37	0.9024	-0.92	0.70	0.1924	0.1714
score_disclosure_2	-0.02	0.34	0.9465	-1.03	0.67	0.1259	0.1701
score_disclosure_3	-0.48	0.20	0.0148	-0.75	0.63	0.2354	0.5104
score_disclosure_4	-0.07	0.33	0.8262	-1.67	0.63	0.0096	0.0604
score_non disclosure	-0.06	0.12	0.6056	-0.20	0.24	0.3965	0.9941
score_stigma	-0.46	0.16	0.0043	-0.16	0.33	0.6278	0.3224

Adjusting for age, sex, education (college and above vs. high school vs. middle school and below), medical insurance, liver cirrhosis, stage, and years of diagnose

Supplemental Table 5. Associations between psychological factors and quality of life - psychological factors by stage of disease

(a) Physical

	Stage						Interaction P-value
	Chronic hepatitis B			Cirrhosis and carcinoma			
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	
score_depression	-0.23	0.02	<0.0001	-0.12	0.07	0.0760	0.2437
score_anxiety	-0.15	0.02	<0.0001	-0.11	0.07	0.1443	0.7285
score_disclosure_1	-0.05	0.21	0.8154	-1.22	0.97	0.2221	0.2032
score_disclosure_2	-0.06	0.20	0.7816	-0.43	0.78	0.5894	0.4256
score_disclosure_3	-0.29	0.12	0.0227	-0.64	0.68	0.3515	0.8635
score_disclosure_4	-0.24	0.19	0.1938	-0.57	0.87	0.5166	0.9862
score_non disclosure	-0.04	0.07	0.5461	-0.05	0.25	0.8388	0.9051
score_stigma	-0.24	0.09	0.0113	-0.36	0.34	0.3101	0.7862

Adjusting for age, sex, education (college and above vs. high school vs. middle school and below), medical insurance, liver cirrhosis, other chronic disease, and years of diagnose

(b) Psychological

	Stage						Interaction P-value
	Chronic hepatitis B			Cirrhosis and carcinoma			
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	
score_depression	-0.23	0.02	<0.0001	-0.16	0.06	0.0193	0.4836
score_anxiety	-0.14	0.02	<0.0001	-0.09	0.07	0.2296	0.6438
score_disclosure_1	-0.20	0.20	0.3075	-0.006	1.00	0.9950	0.8117
score_disclosure_2	-0.09	0.19	0.6221	0.02	0.79	0.9792	0.9404
score_disclosure_3	-0.26	0.12	0.0268	-1.26	0.64	0.0631	0.2384
score_disclosure_4	-0.46	0.18	0.0097	-0.70	0.87	0.4261	0.8947
score_non disclosure	0.0007	0.06	0.9917	-0.13	0.25	0.6264	0.8596
score_stigma	-0.22	0.09	0.0156	-0.58	0.33	0.0952	0.3613

Adjusting for age, sex, education (college and above vs. high school vs. middle school and below), medical insurance, liver cirrhosis, other chronic disease, and years of diagnose

(c) Social

	Stage						Interaction P-value
	Chronic hepatitis B			Cirrhosis and carcinoma			
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	
score_depression	-0.15	0.01	<0.0001	-0.04	0.04	0.2659	0.0480
score_anxiety	-0.10	0.02	<0.0001	-0.004	0.004	0.9342	0.0672
score_disclosure_1	-0.15	0.13	0.2591	-0.05	0.57	0.9334	0.8262
score_disclosure_2	-0.10	0.13	0.4086	0.43	0.44	0.3392	0.4066
score_disclosure_3	-0.14	0.08	0.0731	0.54	0.38	0.1730	0.0496
score_disclosure_4	-0.28	0.12	0.0180	-0.15	0.50	0.7642	0.4165
score_non disclosure	-0.05	0.04	0.2322	0.14	0.14	0.3305	0.1337
score_stigma	-0.18	0.06	0.0024	-0.22	0.20	0.2747	0.9071

Adjusting for age, sex, education (college and above vs. high school vs. middle school and below), medical insurance, liver cirrhosis, other chronic disease, and years of diagnose

(d) Environment

	Stage						Interaction P-value
	Chronic hepatitis B			Cirrhosis and carcinoma			
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	
score_depression	-0.40	0.04	<0.0001	-0.06	0.08	0.5177	0.0055
score_anxiety	-0.32	0.04	<0.0001	-0.15	0.09	0.1103	0.2343
score_disclosure_1	-0.36	0.34	0.2954	0.98	1.19	0.4204	0.3721
score_disclosure_2	-0.31	0.33	0.3418	-0.34	0.95	0.7224	0.7907
score_disclosure_3	-0.55	0.20	0.0074	-0.60	0.82	0.4775	0.7163
score_disclosure_4	-0.71	0.31	0.0215	-0.42	1.06	0.6919	0.4954
score_non disclosure	-0.10	0.11	0.3841	0.11	0.31	0.7278	0.4398
score_stigma	-0.39	0.15	0.0109	-0.44	0.41	0.2950	0.9453

Supplemental Table 6. Associations between psychological factors and quality of life - psychological factors by Education Level

(a) Physical

	Education									Interaction P-value
	College and above			High school			Middle school and below			
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	Estimate	StdErr	P-value	
score_depression	-0.25	0.04	<0.0001	-0.20	0.04	<0.0001	-0.16	0.03	<0.0001	0.1538
score_anxiety	-0.19	0.04	<0.0001	-0.16	0.04	0.0002	-0.08	0.03	0.0167	0.0765
score_disclosure_1	0.13	0.34	0.7104	-0.34	0.37	0.3633	-0.07	0.32	0.8184	0.3371
score_disclosure_2	0.06	0.33	0.8461	-0.15	0.32	0.6469	-0.12	0.31	0.6777	0.5254
score_disclosure_3	-0.20	0.28	0.4748	-0.36	0.31	0.2500	-0.27	0.15	0.0643	0.8414
score_disclosure_4	-0.03	0.31	0.9327	-0.54	0.33	0.1056	-0.25	0.28	0.3782	0.4322
score_non disclosure	0.0004	0.11	0.9676	0.07	0.11	0.5217	-0.23	0.11	0.0329	0.1229
score_stigma	-0.44	0.14	0.0015	-0.23	0.67	0.1034	-0.07	0.18	0.7067	0.2544

Adjusting for age, sex, medical insurance, liver cirrhosis, other chronic disease, stage and years of diagnose

(b) Psychological

	Education									Interaction P-value
	College and above			High school			Middle school and below			
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	Estimate	StdErr	P-value	
score_depression	-0.21	0.04	<0.0001	-0.22	0.04	<0.0001	-0.19	0.03	<0.0001	0.7383
score_anxiety	-0.15	0.04	<0.0001	-0.17	0.04	<0.0001	-0.08	0.03	0.0315	0.0614
score_disclosure_1	0.09	0.30	0.7771	-0.47	0.36	0.1859	-0.20	0.32	0.5369	0.3363
score_disclosure_2	-0.10	0.30	0.7302	-0.19	0.32	0.5542	0.01	0.31	0.9672	0.9337
score_disclosure_3	-0.22	0.25	0.3734	-0.41	0.30	0.1797	-0.25	0.15	0.0860	0.9389
score_disclosure_4	-0.11	0.27	0.6797	-0.82	0.32	0.0101	-0.44	0.28	0.1190	0.2418
score_non disclosure	0.02	0.10	0.8645	0.06	0.10	0.5834	-0.13	0.11	0.2410	0.5059
score_stigma	-0.40	0.12	0.0013	-0.25	0.13	0.0648	-0.08	0.18	0.6791	0.2320

Adjusting for age, sex, medical insurance, liver cirrhosis, other chronic disease, stage and years of diagnose

(c) Social

	Education									Interaction P-value
	College and above			High school			Middle school and below			
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	Estimate	StdErr	P-value	
score_depression	-0.16	0.02	<0.0001	-0.13	0.02	<0.0001	-0.10	0.02	<0.0001	0.1645
score_anxiety	-0.13	0.02	<0.0001	-0.12	0.02	<0.0001	-0.03	0.02	0.1483	0.0024
score_disclosure_1	0.12	0.20	0.5492	-0.51	0.22	0.0212	-0.09	0.22	0.6882	0.0557
score_disclosure_2	0.03	0.20	0.8911	-0.10	0.20	0.6144	-0.14	0.21	0.5153	0.6371
score_disclosure_3	-0.09	0.17	0.6065	-0.09	0.19	0.6442	-0.12	0.10	0.2301	0.9767
score_disclosure_4	-0.04	0.18	0.8359	-0.30	0.20	0.1277	-0.43	0.19	0.0259	0.2848
score_non disclosure	-0.06	0.07	0.3842	0.06	0.06	0.3280	-0.15	0.07	0.0510	0.0563
score_stigma	-0.31	0.08	0.0002	-0.09	0.08	0.2711	-0.17	0.12	0.1633	0.2186

Adjusting for age, sex, medical insurance, liver cirrhosis, other chronic disease, stage and years of diagnose

(d) Environment

	Education									Interaction P-value
	College and above			High school			Middle school and below			
	Estimate	StdErr	P-value	Estimate	StdErr	P-value	Estimate	StdErr	P-value	
score_depression	-0.39	0.06	<0.0001	-0.31	0.06	<0.0001	-0.29	0.06	<0.0001	0.4124
score_anxiety	-0.34	0.06	<0.0001	-0.40	0.06	<0.0001	-0.16	0.06	0.0069	0.0047
score_disclosure_1	0.40	0.52	0.4420	-1.10	0.57	0.0533	-0.27	0.55	0.6294	0.0643
score_disclosure_2	-0.15	0.51	0.7708	-0.42	0.51	0.4107	-0.36	0.53	0.5002	0.7467
score_disclosure_3	-0.31	0.43	0.4649	-0.82	0.48	0.0918	-0.48	0.25	0.0576	0.7282
score_disclosure_4	-0.09	0.47	0.8511	-0.78	0.51	0.1289	-0.97	0.47	0.0424	0.3115
score_non disclosure	-0.12	0.17	0.4686	0.06	0.17	0.7364	-0.26	0.18	0.1573	0.3068
score_stigma	-0.77	0.21	0.0003	-0.24	0.21	0.2550	-0.23	0.31	0.4516	0.1355

Adjusting for age, sex, medical insurance, liver cirrhosis, other chronic disease, stage and years of diagnose