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Supplementary Material

Article Title: Determinants of Hepatitis C Virus Prevalence in People With Serious Mental Illness: A Systematic Review and Meta-Analysis

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List of Supplementary Material for the article

1. [Table 1](#) Quality Analysis of Studies Using the NIH Quality Assessment Tool and a Customized Quality Assessment Tool
2. [Table 2](#) Key Demographics and Seroprevalence From Individual Prevalence Studies
3. [Table 3](#) Rates of IDU in Prospective HCV Seroprevalence Studies
4. [Figure 1](#) Trend in HCV Antibody Prevalence Relative to Prevalence of Reported Substance Abuse Across 14 BBV Prevalence Studies in the Context of SMI

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Supplementary Table 1: Quality analysis of studies using the NIH quality assessment tool and a customized quality assessment tool[‡]

Author	Quality based on NIH score	Customized quality assessment score				Overall assessment
		Study size	Patient selection	Risk factor assessment	Total	
Chang et al	8	2	1	1	4	Good
Di Nardo et al	10	0	1	1	2	Fair
Cividini et al	10	1	2	0	3	Fair
Sawayama et al	9	0	1	2	3	Fair
Rosenberg et al	11	2	2	2	6	Good
Al Jurdi and Burruss	7	1	1	1	3	Fair
Dinwiddie et al	6	2	0	0	2	Fair
Meyer	6	2	0	0	2	Fair
Nakamura et al	6	2	0	0	2	Fair
Kilbourne et al	5	2	1	0	3	Fair
Pirl et al	8	2	1	2	5	Good
Rifai et al	6	2	0	0	2	Fair
Raja et al	10	2	1	1	4	Good
Carney et al	7	2	1	0	3	Fair
Huckans et al	8	2	1	1	4	Good
Freudenreich et al	9	0	0	1	1	Poor
Lacey et al	9	0	1	1	2	Fair
Goldberg et al	8	0	0	0	0	Poor
Rothbard et al	9	2	1	0	3	Fair
Alvarado-Esquivel et al	9	0	1	1	2	Fair
Guimarães et al	10	2	2	0	4	Good
De Hert et al	7	2	0	0	2	Fair
Mamani et al	8	0	0	1	1	Poor
Himelhoch et al	11	2	1	1	4	Good
Kakisi et al	5	2	0	0	2	Fair
Sockalingam et al	9	0	1	1	2	Fair
Gunewardene et al	10	1	0	1	2	Fair
Fuller et al	9	2	1	1	4	Good
Hung et al	8	2	0	0	2	Fair
Sanger et al	7	0	1	0	1	Poor
Durotoye et al	7	1	0	1	2	Fair
Karabulut	4	2	0	0	2	Fair
Bauer-Staeb et al	10	2	2	2	6	Good
Ramachandran et al	12	1	1	2	4	Good
Williams et al	8	0	1	1	2	Fair
Ayano et al	11	1	2	1	4	Good

[‡]The customized quality assessment score is outlined in the Extraction and Data Collection section.

Supplementary Table 2: Key demographics and seroprevalence from individual prevalence studies.

Abbreviations: P = prospective; R = retrospective; SCZ = schizophrenia, BAD = bipolar affective disorder; MDD = major depressive disorder

Author	Year	Country	(n)	Study Type	Male (%)	Age (years)	Mental Health Diagnosis			
							SCZ (%)	BAD (%)	MDD (%)	Other (%)
Chang et al	1993	Taiwan	780	P	66.5	42.0	96.2	-	-	3.8
Di Nardo et al	1995	Italy	176	P	-	-	-	-	-	-
Cividini et al*	1997	Italy	423	P	-	55.0	-	-	-	-
Sawayama et al*	2000	Japan	163	P	52.0	57.9	-	-	-	-
Rosenberg et al	2001	USA	751	P	-	-	44.9	16.8	11.7	19.9
Al Jurdi and Burruss	2003	USA	238	P	50.4	-	44.1	12.6	31.1	-
Dinwiddie et al	2003	USA	1,556	R	73.3	38.4	9.8	26.5	18.7	45.0
Meyer	2003	USA	535	R	74.8	42.7	74.8	6.8	4.8	-
Nakamura et al	2004	Japan	1,193	R	71.1	50.4	37.6	-	9.2	40.7
Kilbourne et al*	2004	USA	4,310	R	90.0	53.0	-	100	-	-
Pirl et al‡	2005	USA	655	R	-	-	34.0	20	-	-
Rifai et al§	2006	USA	3,470	R	-	-	-	-	-	-
Raja et al	2006	Italy	1,492	P	44.5	41.9	9.0	34.1	9.0	9.0
Carney et al*	2006	USA	1,074	R	47.0	40.2	100	-	-	-
Huckans et al	2006	USA	4,644	R	93.3	48.9	100	-	-	-
Freudenreich et al	2007	USA	98	P	75.0	44.7	100	-	-	-
Lacey et al	2007	Australia	71	P	-	30.0	73.0	-	-	-
Goldberg et al§	2008	USA	100	P	54.0	45.1	-	-	-	-
Rothbard et al	2009	USA	656	R	48.0	42.0	33.0	-	57.0	-
Alvarado-Esquivel et al	2009	Mexico	105	P	71.4	46.5	25.7	4.8	1.0	-
Guimarães et al	2009	Brazil	2,300	P	48.1	-	47.3	9.0	13.3	-
De Hert et al	2009	Belgium	595	R	65.0	36.7	81.4	-	-	18.6
Mamani et al	2009	Iran	170	P	56.0	-	49.0	-	-	-
Himelhoch et al	2009	USA	155,172	R	92.5	54.8	57.5	42.5	-	-
Kakisi et al	2009	Turkey	793	R	74.7	-	-	-	-	-
Sockalingam et al	2010	Canada	110	P	-	-	100	-	-	-
Gunewardene et al	2010	Australia	334	P	-	-	-	-	-	-
Fuller et al	2011	USA	11,570	R	91.5	55.7	54.0	46.0	-	-
Hung et al	2012	Taiwan	590	P	58.4	42.5	100	-	-	-
Sanger et al§	2013	UK	57	P	71.9	-	-	-	-	-
Durotoye et al	2014	Nigeria	350	P	51.1	36.5	-	-	-	-
Karabulut	2015	Turkey	5,227	R	78.3	35.5	-	-	-	-
Bauer-Staeb et al	2017	Sweden	97,797	R	48.1	52.0	21.7	-	-	6.3
Ramachandran et al	2018	Australia	260	P	70.0	44.0	19.0	10.0	26.0	-
Williams et al	2020	Australia	97	P	-	-	100	-	-	-
Ayano et al	2020	Ethiopia	309	P	65.4	36.2	43.7	17.5	29.8	9.1

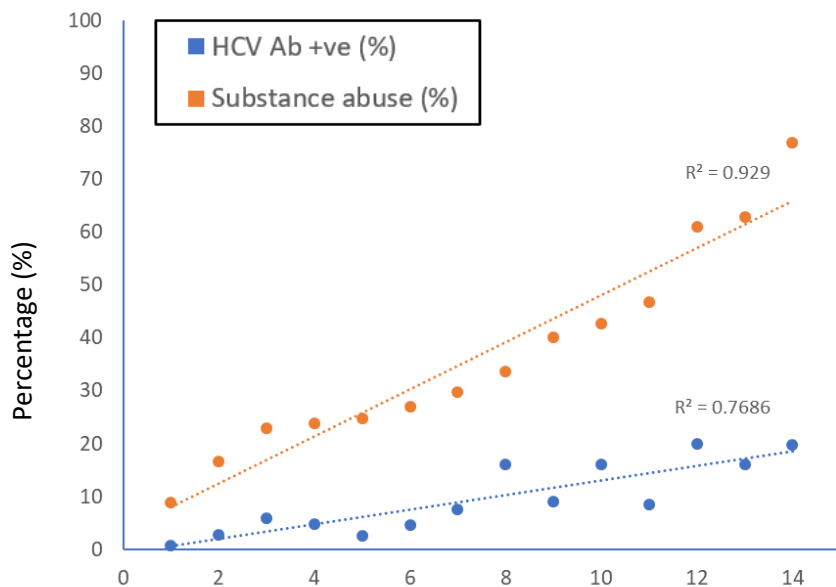
*Patients with psychosis - sub-type not explicated

*Study designed to assess for comorbidity, not BBVs or HCV specifically

§Study not designed for prevalence assessment, but sufficient cross-sectional data available

Supplementary Table 3: Rates of IDU in prospective HCV seroprevalence studies

Author	Year	Country	(n)	Study Type	HCV Ab (%)	Lifetime IDU (%)	IDU in HCV Ab +ve (%)
Chang et al	1993	Taiwan	780	Prospective	6.8	0.0	-
Di Nardo et al	1995	Italy	176	Prospective	11.4	0.0	-
Sawayama et al	2000	Japan	196	Prospective	10.2	1.0	-
Rosenberg et al	2001	USA	751	Prospective	16.1	12.1	75.2
Al Jurdi and Burruss	2003	USA	238	Prospective	16.0	13.9	-
Lacey et al	2007	Australia	71	Prospective	19.7	50.0	50.0
Guimarães et al	2009	Brazil	2300	Prospective	2.63	3.0	-
Sockalingham et al	2010	Canada	110	Prospective	2.7	8.0	66.7
Gunewardene et al	2010	Australia	334	Prospective	5.6	14.4	-
Ramachandran et al	2018	Australia	260	Prospective	10.8	28.0	78.6



Supplementary Figure 1: Trend in HCV antibody prevalence relative to prevalence of reported substance abuse across 14 BBV prevalence studies in the context of SMI. HCV antibody prevalence (blue bars) was categorised in ascending order, and rates of substance abuse (orange bars) charted relative to this. Most studies (57.9%) were drawn from the USA. Both retrospective and prospective studies were included, though the same trend was seen in assessment of retrospective and prospective study designs respectively. ¹⁻¹⁴