

Online Resource 6:

Key characteristics of primary studies (used in meta-analyses)

Article title: Ethnic inequalities in the incidence of diagnosis of severe mental illness in England: A systematic review and new meta-analyses for non-affective and affective psychoses

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<i>STUDY</i>	<i>SETTING</i>	<i>YEAR</i>	<i>DIAGNOSIS (SAMPLE)</i>	<i>ETHNICITY MEASURE(S)</i>	<i>ETHNICITY CATEGORIES/ COUNTRY OF BIRTH</i>	<i>CASES/ DENOMINATOR</i>	<i>INCIDENCE (N) PER 100,000^a PERSONS/MALE/FEMALE</i>		<i>ESTIMATED RR & 95% CI, OR AS OBTAINED FROM PAPERS</i>
BEBBINGTON ET AL 1981	London	1971-1977	Schizophrenia (FC)	Place of birth	United Kingdom Ireland West Indies		117.8 82.5 331.8	101.6 232.6 483.8	Reference population 1.50, 1.20 to 2.00 4.90, 4.20 to 5.70
BEBBINGTON ET AL 1981	London	1971-1977	Affective disorders and Mania (FC)	Place of birth	United Kingdom Ireland West Indies		366.5 628.6 283.0	704.9 1193.0 792.1	Reference population 1.71, 1.27 to 2.31 0.99, 0.70 to 1.39
BHAVSAR ET AL 2014	London	2000-2007	Schizophrenia (FC)	Census categorisation	White British Black African Black Caribbean	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	Reference population 5.90, 0.87 to 40.70 12.01, 1.66 to 86.77
BHUGRA ET AL 1997	London	1991-1993	Schizophrenia (FC)	Self-report, census categorisation	White Black Caribbean Asian	38 / 124,767 38 / 64,817 24 / 67,766			Reference population 1.92, 1.23 to 3.02 1.16, 0.70 to 1.94
BOYDELL ET AL 2013	London	1998-2004	Schizophrenia (FA)	Census categorisation	White Black African Black Caribbean	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	Reference population 5.68, 3.43 to 9.43 8.09, 4.90 to 13.00
CARPENTER & BROCKINGTON 1980	Manchester	1973-1975	Schizophrenia (FA)	Place of birth	United Kingdom West Indies/Africa South Asia	172 / 287,047 23 / 6,906 19 / 5,277			Reference population 5.56, 3.60 to 8.58 6.01, 3.74 to 9.64
CARPENTER & BROCKINGTON 1980	Manchester	1973-1975	Affective psychoses (FA)	Place of birth	United Kingdom West Indies/Africa South Asia	238 / 287,047 8 / 6,906 8 / 5,277			Reference population 1.40, 0.69 to 2.83 1.83, 0.90 to 3.70
CASTLE ET AL 1991	London	1965-1984	Schizophrenia (FC)	Third-party reports	UK-born Caribbean-born		11 62		Reference population 5.68, 4.21 to 7.66
COCHRANE & BAL 1987	England	1981	Schizophrenia (FA)	Place of birth	England Ireland Caribbean India Pakistan	24,276 / 41,084,500 943 / 566,965 720 / 291,632 314 / 378,712 155 / 225,591			Reference population 2.27, 1.89 to 2.73 4.15, 3.42 to 5.02 1.40, 1.26 to 1.57 1.16, 0.99 to 1.36
COCHRANE & BAL 1989	England	1981	Schizophrenia (FA)	Place of birth	England Scotland Wales Northern Ireland Ireland Caribbean India Pakistan		9 10 10 18 18 39 11 19	9 15 11 17 22 35 18 12	Reference population 1.38, 1.12 to 1.70 1.16, 0.90 to 1.50 1.92, 1.38 to 2.69 2.27, 1.89 to 2.73 4.15, 3.42 to 5.02 1.61, 1.24 to 2.10 1.71, 1.23 to 2.39

					Germany		11	7	0.98, 0.58 to 1.65
					Italy		16	13	1.62, 0.94 to 2.80
					USA		13	6	1.07, 0.57 to 1.99
					Kenya		19	6	1.44, 0.84 to 2.49
					Poland		24	34	3.23, 2.18 to 4.79
					Cyprus		18	8	1.49, 0.82 to 2.69
					Hong Kong		7	29	1.92, 1.00 to 3.69
COCHRANE & BAL 1989	England	1981	Affective psychoses and depressive disorders (FA)	Place of birth	England		23	41	Reference population
					Scotland		36	64	1.56, 1.41 to 1.74
					Wales		27	51	1.22, 1.07 to 1.39
					Northern Ireland		36	73	1.70, 1.41 to 2.05
					Ireland		51	87	2.15, 1.95 to 2.38
					Caribbean		15	22	0.58, 0.44 to 0.75
					India		21	37	0.91, 0.75 to 1.09
					Pakistan		23	37	0.94, 0.74 to 1.19
					Germany		13	31	0.69, 0.49 to 0.96
					Italy		14	31	0.70, 0.45 to 1.09
					USA		9	24	0.51, 0.32 to 0.82
					Kenya		10	18	0.44, 0.26 to 0.74
					Poland		16	49	1.02, 0.70 to 1.47
					Cyprus		9	18	0.42, 0.23 to 0.76
					Hong Kong		4	29	0.54, 0.28 to 1.04
COID ET AL 2008	London	1996-2000	Non-affective psychoses (FC)	Census categorisation	White British	82 / 345,080			Reference population
					White Other	46 / 97,420			1.99, 1.38 to 2.85
					Black African	64 / 77,422			3.48, 2.51 to 4.82
					Black Caribbean	66 / 70,978			3.91, 2.83 to 5.41
					Asian	84 / 178,366			1.98, 1.46 to 2.69
					Other	20 / 59,280			1.42, 0.87 to 2.31
COID ET AL 2008	London	1996-2000	Affective psychoses (FC)	Census categorisation	White British	30 / 345,080			Reference population
					White Other	20 / 97,420			2.36, 1.34 to 4.16
					Black African	19 / 77,422			2.82, 1.59 to 5.01
					Black Caribbean	24 / 70,978			3.89, 2.27 to 6.65
					Asian	22 / 178,366			1.42, 0.82 to 2.46
					Other	7 / 59,280			1.36, 0.60 to 3.09
DEAN ET AL 1981	South-East England	1976	Schizophrenia (FA)	Place of birth (by hospital staff)	United Kingdom	1,191 / N/A			Reference population
					Ireland	96 / N/A			2.40, 1.90 to 2.90
					Africa	80/ N/A			4.20, 3.30 to 5.20
					Caribbean	108/ N/A			5.10, 4.20 to 6.20
					India	58/ N/A			3.10, 2.40 to 4.00
					Pakistan	27/ N/A			1.20, 0.95 to 1.90
FEARON ET AL 2006	London, Nottingham, Bristol	1997-1999	Schizophrenia (FC)	Self-report, census categorisation	White British	N/A	N/A	N/A	Reference population
					White Other	N/A	N/A	N/A	2.50, 1.60 to 3.90
					Black African	N/A	N/A	N/A	5.80, 3.90 to 8.40

					Black Caribbean	N/A	N/A	N/A	N/A	9.10, 6.60 to 12.60
					Asian	N/A	N/A	N/A	N/A	1.40, 0.70 to 3.10
					Mixed	N/A	N/A	N/A	N/A	2.60, 1.20 to 5.30
					Other	N/A	N/A	N/A	N/A	3.50, 1.90 to 6.50
FEARON ET AL 2006	London, Nottingham, Bristol	1997-1999	Manic psychosis (FC)	Self-report, census categorisation	White British	N/A	N/A	N/A	N/A	Reference population
					White Other	N/A	N/A	N/A	N/A	1.70, 0.60 to 4.30
					Black African	N/A	N/A	N/A	N/A	6.20, 3.10 to 12.10
					Black Caribbean	N/A	N/A	N/A	N/A	8.00, 4.30 to 14.80
					Asian	N/A	N/A	N/A	N/A	2.70, 0.90 to 7.60
					Mixed	N/A	N/A	N/A	N/A	6.20, 2.60 to 15.00
					Other	N/A	N/A	N/A	N/A	3.00, 0.90 to 10.00
FEARON ET AL 2006	London, Nottingham, Bristol	1997-1999	Depressive psychosis (FC)	Self-report, census categorisation	White British	N/A	N/A	N/A	N/A	Reference population
					White Other	N/A	N/A	N/A	N/A	1.30, 0.50 to 3.20
					Black African	N/A	N/A	N/A	N/A	2.10, 0.90 to 5.00
					Black Caribbean	N/A	N/A	N/A	N/A	3.10, 1.50 to 6.10
					Asian	N/A	N/A	N/A	N/A	3.00, 1.30 to 7.10
					Mixed	N/A	N/A	N/A	N/A	4.00, 1.60 to 10.20
					Other	N/A	N/A	N/A	N/A	5.60, 2.50 to 12.40
GIGGS 1973	Nottingham	1963-1969	Schizophrenia (FA)	Not reported	United Kingdom	338/ N/A	120			Reference population
					Ireland	39/ N/A	709			5.91, 4.25 to 8.22
					Europe (mostly Eastern Europe)	33 / N/A	720			6.00, 4.20 to 8.57
					West Indies	43/ N/A	790			6.58, 4.80 to 9.03
					India, Pakistan	25/ N/A	740			6.17, 4.11 to 9.25
HARRISON ET AL 1988	Nottingham	1984-1986	Schizophrenia (FC)	Census categorisation (household survey), 'skin colour methods'	General population	N/A	N/A	N/A	N/A	Reference population
					Black Caribbean	N/A	N/A	N/A	N/A	12.66, 5.01 to 32.01
HARRISON ET AL 1988	Nottingham	1984-1986	Mania (FC)	Census categorisation (household survey), 'skin colour methods'	General population	N/A				Reference population
					Black Caribbean	4 / 7,435				11.92, 4.05 to 35.02
HARRISON ET AL 1997	Nottingham	1992-1994	Schizophrenia (FC)	Census categorisation	Remaining population	136 / 388,405				Reference population
					Black Caribbean	32 / 9,177				10.12, 5.24 to 19.53
HEMSI 1967	London	1961	Affective disorders (FA)	Place of birth	United Kingdom	79 / 199,465				Reference population
					West Indies	18 / 12,843				3.54, 2.12 to 5.90
HITCH & CLEGG 1980	Bradford	1968-1970	Schizophrenia (FA)	Census categorisation	United Kingdom	530 / 154,793				Reference population
					Foreign-born (mainly Eastern European)	25 / 6,010				4.61, 2.93 to 7.25
HITCH & CLEGG 1980	Bradford	1968-1970	Affective disorders (FA)	Census categorisation	United Kingdom	123 / 154,793				Reference population
					Foreign-born (mainly Eastern European)	22 / 6,010				1.21, 0.81 to 1.81

KING ET AL 1994	London	1991-1992	Schizophrenia (FC)	Self-report, census categorisation	White	15 / 121,438				Reference population
					Black African	3 / 9,381				2.59, 0.75 to 8.94
					Black Caribbean	9 / 14,973				4.87, 2.13 to 11.12
					Black Other	2 / 2,994				5.41, 1.24 to 23.64
					Indian	3 / 6,326				3.84, 1.11 to 13.26
					Pakistani	2 / 1,065				15.20, 3.48 to 66.40
					Other Asian	2 / 4,253				3.81, 0.87 to 16.64
					Other	2 / 3,847				4.21, 0.96 to 18.40
KIRKBRIDE ET AL 2008	London	1996-2000	Schizophrenia (FC)	Self-report, place of birth	White British	61 / 345,078				Reference population
					White Other	26 / 97,420				1.51, 0.95 to 2.39
					Black African	48 / 77,416				3.51, 2.40 to 5.12
					Black Caribbean	48 / 65,070				4.17, 2.86 to 6.09
					Indian	11 / 52,416				1.19, 0.62 to 2.26
					Pakistani	11 / 29,072				2.14, 1.13 to 4.07
					Bangladeshi	45 / 96,872				2.63, 1.79 to 3.86
					Mixed White and Black Caribbean	4 / 5,888				3.84, 1.40 to 10.57
					Mixed Other	2 / 15,364				0.74, 0.18 to 3.01
					Other ethnic group	12 / 43,952				1.54, 0.83 to 2.87
KIRKBRIDE ET AL 2008	London	1996-2000	Affective psychoses (FC)	Self-report, place of birth	White British	30 / 345,078				Reference population
					White Other	20 / 97,420				2.36, 1.34 to 4.16
					Black African	19 / 77,416				2.82, 1.59 to 5.01
					Black Caribbean	18 / 65,070				3.18, 1.77 to 5.71
					Indian	6 / 52,416				1.32, 0.55 to 3.16
					Pakistani	5 / 29,072				1.98, 0.77 to 5.10
					Bangladeshi	11 / 96,872				1.31, 0.65 to 2.61
					Mixed White and Black Caribbean	6 / 5,888				11.72, 4.88 to 28.15
					Mixed Other	0 / 15,364				No cases
					Other ethnic group	7 / 43,952				1.83, 0.80 to 4.17
KIRKBRIDE ET AL 2010	London, Nottingham, Bristol	1996-2000	Affective psychoses (FC)	Census categorisation	White British	97 / N/A				Reference population
					White Other	30 / N/A				2.20, 1.40 to 3.30
					Black African	37 / N/A				3.70, 2.40 to 5.80
					Black Caribbean	41 / N/A				4.00, 2.70 to 5.90
					South Asian	33 / N/A				2.20, 1.50 to 3.30
					Mixed White and Black Caribbean	13 / N/A				11.40, 6.50 to 20.00
					Mixed, other ethnicities	4 / N/A				1.90, 0.70 to 5.20
					Other ethnicities	17 / N/A				3.10, 1.70 to 5.20
KIRKBRIDE ET AL 2017	East Anglia	2009-2013	Schizophrenia (FC)	Self-report, place of birth	White British	N/A	N/A	N/A	N/A	Reference population
					White (non-British)	N/A	N/A	N/A	N/A	1.06, 0.74 to 1.54
					Black African	N/A	N/A	N/A	N/A	4.62, 2.64 to 8.10
					Black Caribbean	N/A	N/A	N/A	N/A	3.74, 1.39 to 10.05
					Indian	N/A	N/A	N/A	N/A	0.55, 0.14 to 2.23
					Pakistani	N/A	N/A	N/A	N/A	3.41, 1.86 to 6.25
					Bangladeshi	N/A	N/A	N/A	N/A	2.85, 1.06 to 7.67

					Arabic ethnicities	N/A	N/A	N/A	N/A	3.14, 1.00 to 9.85
					Mixed ethnicities	N/A	N/A	N/A	N/A	1.97, 0.81 to 4.79
					Other ethnicities	N/A	N/A	N/A	N/A	0.66, 0.31 to 1.40
KIRKBRIDE ET AL 2017	East Anglia	2009-2013	Affective psychoses (FC)	Self-report, place of birth	White British	N/A	N/A	N/A	N/A	Reference population
					White (non-British)	N/A	N/A	N/A	N/A	1.86, 0.98 to 3.51
					Black African	N/A	N/A	N/A	N/A	1.87, 0.26 to 13.54
					Black Caribbean	N/A	N/A	N/A	N/A	15.05, 4.69 to 48.28
					Indian	N/A	N/A	N/A	N/A	No cases
					Pakistani	N/A	N/A	N/A	N/A	4.68, 1.45 to 15.04
					Bangladeshi	N/A	N/A	N/A	N/A	3.71, 0.51 to 26.90
					Arabic ethnicities	N/A	N/A	N/A	N/A	No cases
					Mixed ethnicities	N/A	N/A	N/A	N/A	5.08, 2.41 to 10.70
					Other ethnicities	N/A	N/A	N/A	N/A	0.99, 0.24 to 4.10
LEFF ET AL 1976	London	1965-1974	Mania (FA)	Place of birth	United Kingdom			4		Reference population
					Caribbean			24		6.46, 2.21 to 18.89
LLOYD ET AL 2005	London, Nottingham, Bristol	1997-1999	Bipolar disorder (FC)	Census categorisation	White	N/A	N/A	N/A	N/A	Reference population
					Black African	N/A	N/A	N/A	N/A	6.80, 3.60 to 12.80
					Black Caribbean	N/A	N/A	N/A	N/A	7.00, 3.90 to 12.60
					Asian	N/A	N/A	N/A	N/A	2.90, 1.00 to 8.20
					Mixed	N/A	N/A	N/A	N/A	6.10, 2.40 to 15.70
					Other	N/A	N/A	N/A	N/A	3.40, 1.10 to 11.20
MCGOVERN & COPE 1987	Birmingham	1980-1983	Affective disorders (FA)	Census categorisation (household survey)	White	234 / 200,540				Reference population
					Black Caribbean	20 / 15,660				1.09, 0.69 to 1.73
MITTER ET AL 2004	London	1997-2002	Late-onset schizophrenia (FC)	Census categorisation	White British	27 / 16,521				Reference population
					Black African	3 / 236				7.78, 2.38 to 25.46
					Black Caribbean	5 / 680				4.50, 1.74 to 11.65
					Indian	1 / 124				4.93, 0.68 to 36.03
					Bangladeshi	2 / 1,749				0.70, 0.17 to 2.94
					Chinese	1 / 86				7.11, 0.98 to 51.77
					Other Asian	1 / 109				5.61, 0.77 to 40.94
RWEGELLERA 1977	London	1965-1968	Schizophrenia (FC)	Census categorisation and place of birth (third-party special analysis)	United Kingdom	66 / N/A				Reference population
					West Africa	12 / N/A				24.50, 13.00 to 46.10
					West Indies	25 / N/A				6.20, 3.80 to 10.20
RWEGELLERA 1977	London	1965-1968	Psychotic depression and mania or hypomania (FC)	Census categorisation and place of birth (third-party special analysis)	United Kingdom	273 / N/A				Reference population
					West Africa	12 / N/A				8.20, 4.62 to 14.56
					West Indies	26 / N/A				1.87, 1.25 to 2.80
THOMAS ET AL 1993	Manchester	1984-1987	Schizophrenia (FA)	Third-party reports	UK-born European 16-29 years		35			Reference population
					UK-born European 30-44 years		23			Reference population

					UK-born European 45-pensionable age	1.6	Reference population
					Black Caribbean 16-29 years	320	3.04, 1.60 to 5.78
					Black Caribbean 45-pensionable age	45	(Black Caribbean overall)
					Asian 16-29 years	35	1.66, 0.70 to 3.91
					Asian 30-44 years	73	(Asian overall)
					Asian 45-pensionable age	49	
THOMAS ET AL 1993	Manchester	1984-1987	Manic depression (FA)	Third-party reports	UK-born European 16-29 years	23	Reference population
					UK-born European 30-44 years	35	Reference population
					UK-born European 45-pensionable age	39	Reference population
					Black Caribbean 16-29 years	45, 32	0.68, 0.25 to 1.87
					Asian 16-29 years	33	(Black Caribbean overall)
					Asian 30-44 years	24	0.74, 0.27 to 2.04
					Asian 45-pensionable age	25	(Asian overall)
VAN OS ET AL 1996A	London	1965-1984	Mania (FC)	Place of birth, 'skin colour method' and household survey	United Kingdom	18 / N/A	Reference population
					West Indies	10 / N/A	3.68, 1.91 to 7.09
VAN OS ET AL 1996B	London	1988-1992	Schizophrenia (FA)	Self-report and place of birth, but also 'skin colour method'	White	7.8	Reference population
					Black African	53.2	4.20, 2.80 to 6.20
					Black Caribbean	34.4	3.10, 2.00 to 4.70

a = Incidence (n) per 100,000 is reported if available and the respective study did not provide sufficient data on cases and denominator by ethnic group.

Abbreviations = CI: confidence intervals; FC: first contact with psychiatric services; FA: first admission to hospital; RR: relative risk.