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## **Supplementary Material**

**Article Title:** The Impact of Insecure Immigration Status and Ethnicity on Antenatal Mental Health Among Migrant Women

**Author(s):** Fraser M. Anderson, PhD<sup>a,\*</sup>; Stephani L. Hatch, PhD<sup>b</sup>; Elizabeth G. Ryan, PhD<sup>c</sup>; Kylee Trevillion, PhD<sup>a</sup>; and Louise M. Howard, PhD MRCP FRCPsych<sup>a</sup>

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### **List of Supplementary Material for the article**

1. [Table 1](#) Weighted associations of variables of interest with the exposure, migrant status, and the outcome, CMD (n=545 unless missing specified)

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**Supplementary Table 1: Weighted associations of variables of interest with the exposure, migrant status, and the outcome, CMD (n=545 unless missing specified)**

Variable	Level	UK-born % (95% CIs)	Migrant % (95% CIs)	Chi <sup>2</sup> <i>p</i>	No CMD % (95 % CIs)	CMD % (95% CIs)	Chi <sup>2</sup> <i>p</i>
<b>Whooley status</b> <i>0 missing</i>	Negative	91.52 (89.43-93.22)	90.31 (88.05-92.17)	0.39	80.88 (75.52-85.29)	19.12 (14.71-24.48)	<0.01
	Positive	8.48 (6.78-10.57)	9.69 (7.83-11.95)		42.40 (36.55-48.06)	57.80 (51.94-63.45)	
<b>Sociodemographics</b>							
<b>Age</b> <i>0 missing</i>	<25	4.70 (2.40-8.97)	6.60 (3.79-11.24)	0.29	33.71 (16.87-56.04)	66.29 (43.96-83.13)	<0.01
	25-29	14.63 (9.84-21.20)	22.50 (16.62-29.72)		76.92 (64.73-85.82)	23.08 (14.18-35.27)	
	30-34	35.11 (27.95-43.02)	34.53 (27.44-42.38)		78.12 (69.65-84.74)	21.88 (15.26-30.35)	
	35-39	36.73 (29.43-44.70)	28.17 (21.63-35.77)		80.01 (71.30-86.58)	19.99 (13.42-28.70)	
	40+	8.83 (5.18-14.66)	8.20 (4.85-13.51)		94.54 (89.87-97.13)	5.46 (2.87-27.48)	
<b>Ethnicity</b> <i>0 missing</i>	White	74.43 (66.97-80.69)	36.18 (29.01-44.02)	<0.01	80.45 (74.14-85.51)	19.55 (14.49-25.86)	0.06
	Black	17.65 (12.43-24.45)	43.42 (35.86-51.30)		73.99 (64.59-81.60)	26.01 (18.40-35.41)	
	Asian	2.32 (0.82-6.40)	9.22 (5.56-14.90)		87.90 (69.68-95.83)	12.10 (4.17-30.32)	
	Mixed	4.12 (1.93-8.57)	2.48 (0.94-6.36)		48.16 (19.78-77.78)	51.84 (22.22-80.22)	
	Other	1.48 (0.39-5.45)	8.71 (0.52-14.22)		65.55 (39.62-84.66)	34.45 (15.34-60.38)	
<b>Education</b> <i>0 missing</i>	GCSE/equiv alent or less	3.48 (1.55-7.61)	12.77 (8.50-18.73)	<0.01	68.30 (49.71-82.45)	31.70 (17.55-50.29)	0.23
	A-level or	16.23	37.00		73.57 (63.30-81.79)	26.43 (18.21-36.70)	

	equivalent	(11.25-22.85)	(29.78-44.86)				
	University degree or higher	80.29 (73.35-85.78)	50.23 (42.44-58.02)		79.98 (74.13-84.79)	20.02 (15.21-25.87)	
<b>Employment</b> <i>2 missing</i>	Paid employment	80.01 (72.96-85.58)	55.89 (48.02-63.47)	<0.01	76.88 (70.85-23.12)	23.12 (18.01-29.15)	0.97
	Voluntary job/student	1.09 (0.30-3.97)	7.32 (4.08-12.77)		78.07 (50.63-92.51)	21.93 (7.49-49.37)	
	Not working	15.03 (10.20-21.59)	31.59 (24.80-39.26)		79.09 (68.89-86.59)	20.91 (13.41-31.11)	
	Other	3.87 (1.73-8.42)	5.21 (2.72-9.73)		74.54 (50.00-81.53)	25.46 (10.45-50.00)	
<b>Income</b> <i>5 missing</i>	0-15k	6.60 (3.62-11.75)	15.01 (10.32-21.33)	<0.01	57.10 (40.58-72.17)	42.90 (27.83-59.42)	<0.01
	15-45	24.00 (17.86-31.45)	23.81 (17.75-31.16)		74.83 (64.11-83.18)	25.17 (16.82-35.89)	
	46+	63.78 (55.86-71.02)	26.94 (20.49-34.53)		82.51 (75.47-87.85)	17.49 (12.15-24.53)	
	rather not say	5.62 (3.02-10.21)	34.24 (27.22-42.04)		80.78 (70.14-88.26)	19.22 (11.74-29.86)	
<b>Relationship status</b> <i>0 missing</i>	Single	6.12 (3.24-11.28)	9.97 (6.33-15.34)	0.50	48.13 (29.89-66.89)	51.87 (33.11-70.11)	<0.01
	Partner not cohabiting	9.01 (5.54-14.31)	10.93 (7.00-16.65)		74.67 (59.39-85.59)	25.33 (14.41-40.61)	
	Married/cohabiting	84.16 (77.66-89.04)	77.97 (71.09-83.58)		80.43 (75.18-84.78)	19.57 (15.22-24.82)	
	Separated/divorced/widowed	0.71 (<0.01-4.89)	1.14 (0.33-3.87)		82.90 (50.62-95.82)	17.10 (4.18-49.38)	
<b>Living status</b> <i>4 missing</i>	Alone	9.61 (5.85-15.38)	11.00 (7.07-16.73)	0.45	69.53 (52.64-82.41)	30.47 (17.59-47.36)	0.06
	With spouse/partner	80.40 (73.40-85.91)	73.73 (66.46-79.91)		79.89 (74.47-84.41)	20.11 (15.59-25.53)	

	tner						
	With parents, friends or family	6.10 (3.32-10.94)	10.44 (6.56-16.21)		75.53 (57.30-87.65)	24.47 (12.35-42.70)	
	Other	3.90 (1.75-8.48)	4.83 (2.53-9.01)		52.03 (27.50-81.52)	47.97 (24.38-72.50)	
<b>Have living children</b> <i>0 missing</i>	No	52.63 (44.69-60.45)	44.12 (36.52-52.00)	0.14	75.88 (68.65-81.89)	24.12 (18.11-31.35)	0.54
	Yes	47.37 (39.55-55.31)	55.88 (48.00-63.48)		78.68 (71.96-84.15)	21.32 (15.85-28.04)	
<b>Obstetric/medical</b>							
<b>Late booking</b> <i>0 missing</i>	No	90.08 (84.16-93.94)	80.24 (73.40-85.67)	0.02	77.53 (72.28-82.04)	22.47 (17.96-27.72)	0.83
	Yes	9.92 (6.06-15.84)	19.76 (14.33-26.60)		76.15 (62.76-85.81)	23.85 (14.19-37.24)	
<b>Planned pregnancy</b> <i>0 missing</i>	Planned	78.68 (71.60-84.39)	67.09 (59.44-73.92)	0.02	81.37 (75.95-85.80)	18.63 (14.20-24.05)	<0.01
	Unplanned	21.32 (15.61-28.40)	32.91 (26.08-40.56)		66.63 (56.39-75.50)	33.37 (24.50-43.61)	
<b>Miscarriages/still births</b> <i>2 missing</i>	No	64.04 (56.09-71.29)	70.65 (63.02-77.28)	0.22	75.47 (69.36-80.70)	24.53 (19.30-30.64)	0.22
	Yes	35.96 (28.71-43.91)	29.35 (22.72-36.98)		81.36 (73.11-87.51)	18.64 (12.49-26.89)	
<b>Terminations</b> <i>1 missing</i>	No	75.26 (67.86-81.43)	67.24 (59.50-74.15)	0.12	78.60 (72.93-83.35)	21.40 (16.65-27.07)	0.38
	Yes	24.74 (18.57-32.14)	32.76 (25.85-40.50)		74.16 (64.42-81.98)	25.84 (18.02-35.58)	
<b>Current smoking</b> <i>0 missing</i>	No	96.46 (92.36-98.40)	99.56 (99.06-99.79)	<0.01	77.97 (73.14-82.14)	22.03 (17.86-26.86)	0.04
	Yes	3.54 (1.60-7.64)	0.44 (0.21-0.94)		45.93 (16.48-78.53)	54.07 (21.47-83.52)	
<b>BMI</b> <i>123 missing</i>	<i>Mean (SD)</i>	24.24 (23.28-25.20)	23.42 (22.57-24.28)	<i>(ttest p)</i> 0.20	23.67 (22.96-24.38)	24.36 (22.77-25.96)	<i>(ttest p)</i> 0.42

Other risk factors							
<b>Traumatic events</b> <i>14 missing</i>	None	49.22 (41.26-57.22)	56.86 (48.93-64.45)	0.19	82.96 (76.67-87.82)	17.04 (12.18-23.33)	0.03
	1 event	30.08 (23.24-37.94)	29.77 (23.08-37.47)		73.28 (63.57-81.17)	26.72 (18.83-36.43)	
	2 or more events	20.70 (15.00-27.87)	13.37 (8.93-19.54)		67.63 (54.45-78.50)	32.37 (21.50-45.55)	
<b>IPV</b> <i>67 missing</i>	No	95.79 (91.07-98.07)	95.92 (91.22-98.15)	0.96	79.45 (74.42-83.71)	20.55 (16.29-25.58)	0.82
	Yes	4.21 (1.93-8.93)	4.08 (1.85-8.78)		76.92 (48.49-92.19)	23.08 (7.81-51.51)	
<b>Low social support</b> <i>25 missing</i>	No	93.49 (88.69-96.33)	78.70 (71.72-84.34)	<0.01	80.22 (75.00-84.57)	19.78 (15.43-25.00)	<0.01
	Yes	6.51 (3.67-11.31)	21.30 (15.66-28.28)		61.20 (46.99-73.73)	38.80 (26.27-53.01)	
<b>Hazardous alcohol use</b> <i>56 missing</i>	No	75.00 (67.27-81.41)	95.13 (90.12-97.66)	<0.01	79.08 (73.68-83.62)	20.92 (16.38-26.32)	0.42
	Yes	25.00 (18.59-32.73)	4.87 (2.34-9.88)		73.76 (59.26-84.45)	26.24 (15.55-40.74)	
<b>Hazardous substance use</b> <i>40 missing</i>	No	89.05 (82.97-93.14)	96.88 (92.77-98.68)	<0.01	78.69 (73.61-83.01)	21.31 (16.99-27.39)	0.49
	Yes	10.95 (6.86-17.03)	3.12 (1.32-7.23)		72.49 (51.03-86.95)	27.51 (13.05-48.97)	
Migrant-specific variables (n=283)							
<b>Continent of birth</b> <i>0 missing</i>	Europe				80.84 (67.27-89.65)	19.16 (10.35-32.73)	0.19
	Africa				79.20 (68.28-87.07)	20.80 (12.93-31.72)	
	Asia				92.38 (83.85-96.59)	7.62 (3.41-16.15)	
	Americas & Australasia				69.06 (51.47-82.45)	30.94 (17.55-48.53)	
<b>Year came to the UK</b>	Over 10 years				75.67 (64.81-84.01)	24.33 (15.99-35.19)	0.57

<i>0 missing</i>	10-4 years	79.54 (66.44-88.41)	20.46 (11.59-33.56)	
	Less than 4 years	83.92 (70.13-92.06)	16.08 (7.94-29.87)	
<b>Immigration status</b> <i>0 missing</i>	UK National	70.76 (55.46-82.47)	29.24 (17.53-44.54)	0.03
	EEA citizen	82.04 (68.67-90.49)	17.96 (9.51-31.33)	
	Indefinite leave to remain	81.16 (64.30-91.16)	18.84 (8.84-35.70)	
	Exceptional leave to remain or temporary admission	73.34 (47.60-89.29)	26.66 (10.71-52.40)	
	Awaiting initial decision or appealing initial refusal	47.56 (17.46-79.55)	52.44 (20.45-82.54)	
	Spousal/family/ancestral visa	97.42 (91.19-99.28)	2.58 (0.72-8.81)	
	Other (all are temporary visas, unknown or overstayers)	97.61 (89.53-99.49)	2.39 (0.51-10.47)	
<b>Interpreter needed</b> <i>0 missing</i>	Yes	78.84 (71.57-84.64)	21.16 (15.36-28.43)	0.92
	No	77.90 (54.90-91.08)	22.10 (8.92-45.10)	