Epidemiology of depressive disorders in people living with hypertension in

Africa: a systematic review and meta-analysis

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Supplementary Table 1. Search strategy

Search	Search terms
#1	'africa'/exp OR africa OR 'algeria'/exp OR algeria OR 'angola'/exp
	OR angola OR 'benin'/exp OR benin OR 'botswana'/exp
	OR botswana OR 'burkina faso'/exp OR 'burkina faso' OR 'burundi'/exp
	OR burundi OR 'cameroon'/exp OR cameroon OR 'canary islands'/exp
	OR 'canary islands' OR 'cape verde'/exp OR 'cape verde' OR 'central african
	republic'/exp OR 'central african republic' OR 'chad'/exp
	OR chad OR 'comoros'/exp OR comoros OR 'congo'/exp
	OR congo OR 'democratic republic of congo' OR 'djibouti'/exp
	OR djibouti OR 'egypt'/exp OR egypt OR 'equatorial guinea'/exp OR 'equatorial
	guinea' OR 'eritrea'/exp OR eritrea OR 'ethiopia'/exp
	OR ethiopia OR 'gabon'/exp OR gabon OR 'gambia'/exp
	OR gambia OR 'ghana'/exp OR ghana OR 'guinea'/exp OR guinea OR 'guinea
	bissau'/exp OR 'guinea bissau' OR 'ivory coast'/exp OR 'ivory coast' OR 'cote
	ivoire' OR jamahiriya OR 'kenya'/exp OR kenya OR 'lesotho'/exp
	OR lesotho OR 'liberia'/exp OR liberia OR 'libya'/exp
	OR libya OR 'madagascar'/exp OR madagascar OR 'malawi'/exp
	OR malawi OR 'mali'/exp OR mali OR 'mauritania'/exp
	OR mauritania OR 'mauritius'/exp OR mauritius OR 'mayotte'/exp
	OR mayotte OR 'morocco'/exp OR morocco OR 'mozambique'/exp
	OR mozambique OR 'namibia'/exp OR namibia OR 'niger'/exp
	OR niger OR 'nigeria'/exp OR nigeria OR principe OR 'reunion'/exp
	OR reunion OR 'rwanda'/exp OR rwanda OR 'sao tome' OR 'senegal'/exp
	OR senegal OR 'seychelles'/exp OR seychelles OR 'sierra leone'/exp OR 'sierra
	leone' OR 'somalia'/exp OR somalia OR 'south africa'/exp OR 'south
	africa' OR 'st helena'/exp OR 'st helena' OR 'sudan'/exp
	OR sudan OR 'swaziland'/exp OR swaziland OR 'tanzania'/exp
	OR tanzania OR 'togo'/exp OR togo OR 'tunisia'/exp
	OR tunisia OR 'uganda'/exp OR uganda OR 'western sahara'/exp OR 'western
	sahara' OR 'zaire'/exp OR zaire OR 'zambia'/exp OR zambia OR 'zimbabwe'/exp
	OR zimbabwe OR 'central africa'/exp OR 'central africa' OR 'central african'/exp
	OR 'central african' OR 'west africa'/exp OR 'west africa' OR 'west african'/exp
	OR 'west african' OR 'western africa'/exp OR 'western africa' OR 'western
	african'/exp OR 'western african' OR 'east africa'/exp OR 'east africa' OR 'east
	african'/exp OR 'east african' OR 'eastern africa'/exp OR 'eastern
	africa' OR 'eastern african'/exp OR 'eastern african' OR 'north africa'/exp
	OR 'north africa' OR 'north african'/exp OR 'north african' OR 'northern
	africa'/exp OR 'northern africa' OR 'northern african'/exp OR 'northern
	african' OR 'south african'/exp OR 'south african' OR 'southern africa'/exp
	OR 'southern africa' OR 'southern african'/exp OR 'southern african' OR 'sub
	saharan africa'/exp OR 'sub saharan africa' OR 'sub saharan african'/exp OR 'sub
	saharan african' OR 'subsaharan africa'/exp OR 'subsaharan
	africa' OR 'subsaharan african'
#2	'depression'/exp OR depression OR 'depressive disorder'/exp OR 'depressive
	disorder' OR 'depressive symptom'/exp OR 'depressive
	symptom' OR 'depressive neuros*' OR 'depressive syndrome*'

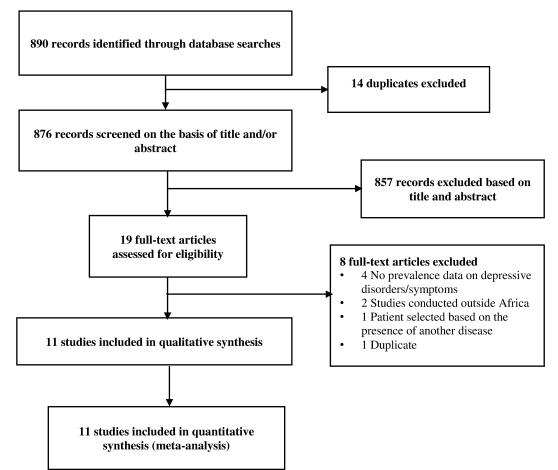
÷	#3	'hypertension'/exp OR hypertension OR 'high blood pressure'/exp OR 'high
		blood pressure' OR (high AND ('blood'/exp OR blood) AND ('pressure'/exp
		OR pressure))
÷	#4	#1 AND #2 AND #3

Supplementary Table 2. Methodological quality of included studies

Author, Year	Sampling method	Timing of data collection	Sample size adequate	Response rate	Same method of data collection for all participants	SUMMARY (Risk of bias)
Ademola, 2019	Convenience	Prospectively	No	Not described	Yes	Moderate
Bhana, 2015	Convenience	Prospectively	Yes	Not described	Yes	Moderate
Geldsetzer, 2019	Stratified Random	Prospectively	Yes	Adequate	Yes	Low
Grimsrud, 2009	Stratified Multistage	Prospectively	Yes	Not described	Yes	Low
Hamer, 2012	Convenience	Prospectively	Yes	Not described	Yes	Moderate
lgwe, 2013	Convenience	Prospectively	Yes	Not described	Yes	Moderate
lloh, 2018	Convenience	Prospectively	Yes	Not described	Yes	Moderate
Kretchy, 2014	Time-Location	Prospectively	Yes	Not described	Yes	Moderate
Okunrinboye, 2019	Systematic Random	Prospectively	Yes	Not described	Yes	Low
Umer, 2019	Convenience	Prospectively	No	Adequate	Yes	Moderate
Yaméogo, 2015	Convenience	Prospectively	Yes	Not described	Yes	Moderate

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Supplementary Figure 1. PRISMA flow diagram



Supplementary Figure 2. Meta-analysis prevalence of depressive disorders by setting

Author, Year	Cases	Total	Prevalence, %	[95% C.I.]	Weight	Prevalence, %		e,%	
Hospital-based									
Yaméogo, 2015	69	414	16.7	[13.2; 20.6]	20.1%	-			
Okunrinboye, 2019	81	400	20.2	[16.4; 24.5]	20.0%				
lgwe, 2013	72	270	26.7	[21.5; 32.4]	19.0%		-		
Subgroup prevalence		1084	20.9	[15.7; 26.5]	59.1%	\diamond			
Heterogeneity: $I^2 = 79.5\%$, p = 0.00	076							
Population/Communit	y based	I							
Bhana, 2015	34	345	9.9	[6.9; 13.5]	19.7%	+			
Grimsrud, 2009	163	767	21.3	[18.4; 24.3]	21.2%	-			
Subgroup prevalence		1112	15.2	[5.9; 27.9]	40.9%	\sim			
Heterogeneity: $I^2 = 95.8\%$, p < 0.00	001							
Pooled Prevalence		2196	18.6	[13.8; 23.9]	100.0%				
Heterogeneity: $I^2 = 89.2\%$			0 20	40	60	80			
	Residual heterogeneity: $l^2 = 91.1\%$, $p < 0.0001$ 0 20 40 60 80 Test for subgroup differences: $\chi_1^2 = 0.74$, df = 1 ($p = 0.3900$)								

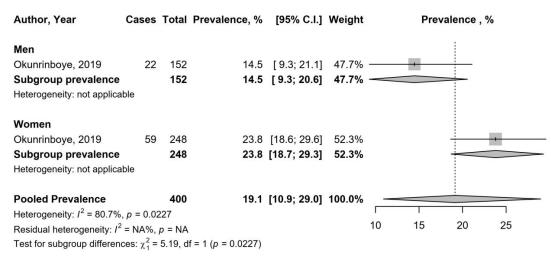
Supplementary Figure 3. Meta-analysis prevalence of depressive symptoms by setting

Author, Year	Cases	Total	Prevalence, %	[95% C.I.]	Weight	Prevalence, %	
Hospital-based Kretchy, 2014 Ademola, 2019	39 62			[7.0; 13.1] [20.7; 32.2]	16.8% 16.7%	* _	
Ademola, 2019 Umer, 2019 Iloh, 2018	50 69 118	120 128	41.7 53.9	[32.7; 51.0] [44.9; 62.8] [75.9; 88.9]	16.5% 16.5%		-
Subgroup prevalence Heterogeneity: $I^2 = 98.8\%$		1027		[16.2; 70.2]			
Population/Communit	y based	ł					
Geldsetzer, 2019 Subgroup prevalence Heterogeneity: not applica		1822 1822		[15.7; 19.2] [15.7; 19.2]		*	
Pooled Prevalence Heterogeneity: $l^2 = 98.7\%$ Residual heterogeneity: l^2 Test for subgroup differen	2 = 98.8%)				

Supplementary Figure 4. Meta-analysis prevalence of major depressive disorders by setting

Author, Year	Cases	Total	Prevalence, %	[95% C.I.]	Weight		Prev	alenc	е,%		
Hospital-based Kretchy, 2014	17	400	4.2	[2.5; 6.7]	50.7%		_				
Subgroup prevalence Heterogeneity: not applica		400		[2.5; 6.5]							
Population/Communit Hamer, 2012	32	254		[8.8; 17.3]	49.3%				,	-	
• • •	Subgroup prevalence 254 12.6 [8.8; 17.0] 49.3% Heterogeneity: not applicable										
Pooled Prevalence 654 7.9 [1.7; 17.9] 100.0% : Heterogeneity: $l^2 = 93.3\%$, $p = 0.0001$ Image: comparison of the terogeneity: $l^2 = NA\%$, $p = NA$ Image: comparison of teropean											

Supplementary Figure 5. Meta-analysis prevalence of depressive disorders by sex



Supplementary Figure 6. Meta-analysis prevalence of depressive symptoms by sex

