

S5 Table. The prevalence of metabolic syndrome estimated by the included studies according to criteria

Reference	Country	Area	Study site	Study type	Study period	N	Overall prevalence of metabolic syndrome					
							EGIR 2003	ATPIII 2001	ATPIII 2004-2005	IDF 2005	JIS 2009	Modified ATPIII 2005
Intercontinental												
Samaras, et al, 2007 [1]	USA, Europe, Australia, Asia, South America	National	Hospital + community based	Case-control	NR	788		18	14			
Wand, et al, 2007 [2]	Australia, Brazil, Canada, New Zealand, 17 European countries	Urban	Hospital	Cross-sectional	1999-2002	881		8.5	7.8			
Worm, et al, 2010 [3]	USA, Australia, 21 European countries	National	Hospital (212 clinics)	Cross-sectional	2006-2007	23853					41.6*	Adapted ATPIII 2005, using BMI ≥ 30 for central obesity component
America												
Adeyemi, et al, 2008 [4]	USA	Urban	Hospital	Cross-sectional	2005-2006	121			34			
Ances, et al, 2009 [5]	USA	National	Hospital	Case-control	NR	66					15.2*	Adapted ATPIII 2005, using BMI for central obesity
Baum, et al, 2006 [6]	USA	National	Community	Cross-sectional	2002-2003	118		15.1				
Hadigan, et al, 2013 [7]	USA	Urban	Hospital (2 clinics)	Cross-sectional	2007-2011	182			13.7			
Jacobson, et al, 2006 [8]	USA	Urban	Community	Cross-sectional	2000-2003	477				24		
Johnsen, et al, 2006 [9]	USA	National	Hospital	Case-control	2002-2003	97		31				
Krishnan, et al, 2012 [10]	USA	National	Hospital	Cross-sectional	2001-2007	2247				20		
Mondy, et al, 2007 [11]	USA	Urban	Hospital	Cross-sectional	2005	471				25.5		
Pullinger, et al, 2010 [12]	USA	Urban	Community	Longitudinal, cross-sectional	2005-2007	296		30				
Sobieszczyk, et al, 2008 [13]	USA	Urban	Hospital + community	Prospective, cross-sectional	2000-2004	1725				33		
Sterling, et al, 2008 [14]	USA	Urban	Hospital	Cross-sectional	1998-2006	222		9				

Tiozzo, et al, 2015 [15]	USA	Urban	Hospital	Cross-sectional	2013	89	33*	Adapted ATPIII 2001, including taking treatments for hypertension or diabetes mellitus		
Cahn, et al, 2010 [16]	Argentina	National	Hospital	Cross-sectional	2006-2007	1015	22.3			
	Brazil	National	Hospital	Cross-sectional	2006-2007	1001	25.4			
	Colombia	National	Hospital	Cross-sectional	2006-2007	474	8.4			
	Chile	National	Hospital	Cross-sectional	2006-2007	44	13.6			
	Ecuador	National	Hospital	Cross-sectional	2006-2007	252	19.1			
	Peru	National	Hospital	Cross-sectional	2006-2007	417	13.7			
	Venezuela	National	Hospital	Cross-sectional	2006-2007	807	22.4			
Alencastro, et al, 2012 [17]	Brazil	Urban	Hospital	Cross-sectional	NR	1240		17.2	22.1	24.7
Da Silva, et al, 2009 [18]	Brazil	Urban	Hospital (7 centers)	Cross-sectional	2004-2006	319	12.3			
Gasparotto, et al, 2012 [19]	Brazil	National	Hospital (multi-centers)	Cross-sectional	NR	614	19.4	31.9		
Lauda, et al, 2011 [20]	Brazil	Urban	Hospital	Cross-sectional	2007-2008	249	20.9			
Leite, et al, 2010 [21]	Brazil	Urban	Hospital	Cross-sectional	2008	100		52		
Signorini, et al, 2012 [22]	Brazil	National	Hospital	Cross-sectional	2005	819	20.6			
Ramirez-Marrero, et al, 2010 [23]	Puerto Rico	Urban	Hospital community	Cross-sectional	2003-2007	897		35.4		
Europe										
Hansen, et al, 2009 [24]	Denmark	National	Hospital	Cross-sectional	2004-2006	566	27			
Badiou, et al, 2008 [25]	France	National	Hospital	Cross-sectional	1999	232	7.3	11.2		
Biron, et al, 2012 [26]	France	National	Hospital (5 centers)	Cross-sectional	2000-2007	269		18.2		
Martin, et al, 2008 (SHIVA study) [27]	France	Urban	Hospital	Cross-sectional	2003	140	7.1			
Sawadogo, et al, 2014 [28]	Burkina Faso	Urban	Hospital	Cross-sectional	2011	400		12.3	10	

Bonfanti, et al, 2010 [29]	Italy	Urban	Hospital (14 centers)	Cross-sectional	2007	292		12.3*			Adapted ATPIII 2001, including taking medication for HTN or DM
Bonfanti, et al, 2007[30]	Italy	Urban	Hospital (18 centers)	Cross-sectional	2005	1243		20.8*			Adapted ATPIII 2001, including taking medication for HTN or DM
Calza, et al, 2011 [31]	Italy	Urban	Hospital	Cross-sectional	2009	755		9.1			
De Socio, et al, 2014 (HIV-Hy study) [32]	Italy	National	Hospital	Cross-sectional	2010-2011	765				33.4	
Gazzaruso, et al, 2003 [33]	Italy	National	Hospital	Cross-sectional	NR	287	33.1				
Guaraldi, et al, 2012 [34]	Italy	National	Hospital (2 centers)	Cross-sectional	2009-2010	133			24.8		
Guaraldi, et al, 2011 [35]	Italy	National	Hospital (2 centers)	Cross-sectional	2007-2008	143		14.7			
Janiszewski et al, 2011 [36]	Italy	National	Hospital	Cross-sectional	2005-2009	2322		25.6			
Maloberti, et al, 2013[37]	Italy	National	Hospital	Cross-sectional	NR	108		17.6*			Adapted ATPIII 2001, using BMI levels corresponding with WC in Italian adults
Schillaci, et al, 2008 [38]	Italy	Urban	Hospital	Case-control	NR	39		18			
Bergersen,et al, 2006 [39]	Norway	Urban	Hospital	Cross-sectional	2000-2001	263		13.3*			Adapted ATPIII 2001, including taking medications for HTN or DM
Freitas, et al, 2011 [40]	Portugal	National	Hospital	Cross-sectional	NR	345			52.2	43.2	
Cubero, et al, 2011 [41]	Spain	National	Hospital	Cross-sectional	NR	159	28.3	10.1		15.1	
Estrada, et al, 2006 [42]	Spain	National	Hospital	Cross-sectional	NR	146			15.8		
Jerico, et al, 2005 [43]	Spain	Urban	Hospital	Cross-sectional	2003	710		17*			Adapted ATPIII 2001, including taking medications for HTN or DM
Palacios, et al, 2007 [44]	Spain	National	Hospital	Cross-sectional	2002-2003	60		16.6*			Adapted ATPIII 2001, using BMI \geq 26.7 (validated) for central obesity

Young, et al, 2009 [45]	Switzerland	National	Hospital	Cross-sectional	2000-2006	1644			15*	Adapted IDF 2005, using random glucose level for raised glucoism
Elgalib, et al, 2011 [46]	UK	Urban; Peri-urban	Hospital (2 centers)	Cross-sectional	2005-2006	678		14	10	
Africa										
Zannou, et al, 2009 [47]	Benin	Urban	Hospital	Cross-sectional	2004-2005	79			13	
Mbunkah, et al, 2014 [48]	Cameroon	National	Hospital	Cross-sectional	2010-2011	173	15.6			
Ngatchou, et al, 2013 [49]	Cameroon	Urban	Hospital	Cross-sectional	2009-2010	108			47	
Berhane, et al, 2012 [50]	Ethiopia	Urban	Hospital	Cross-sectional	2010	313		21.1		
Tesfaye, et al, 2014 [51]	Ethiopia	Urban	Hospital	Cross-sectional	2013	374	16.8		23.8	
Ayodele, et al, 2012 [52]	Nigeria	Urban	Hospital	Cross-sectional	NR	291	12.7		17.2	21
Muhammad, et al, 2013 [53]	Nigeria	Urban	Hospital	Cross-sectional	2009	200	15			
Awotedu, et al, 2010 [54]	South Africa	Urban	Hospital	Cross-sectional	2009-2010	196	20.4		22.9	
Fourie, et al, 2010 [55]	South Africa	Urban; Rural	Community	Cross-sectional	2005	300	15.2		21.1	
Asia										
Gupta, et al, 2011 [56]	India	Urban	Hospital	Cross-sectional	2007-2009	68		25	19.1	
Bajaj, et al, 2013 [57]	India	Urban	Hospital	Cross-sectional	2010-2011	70		20		
Wu, et al, 2012 [58]	Taiwan	Nationwide	Hospital	Cross-sectional	2008-2009	803		26.2		
Jantarapak,de et al, 2014 [59]	Thailand	National	Hospital (6 centers)	Cross-sectional	2009-2011	580		22.2		

ATPIII, Adults Treatment Panel III; BMI, body mass index; DM, diabetes mellitus; EGIR, European Group for the Study of Insulin Resistance; HTN, hypertension; IDF, International Diabetes Federation; JIS, Joint Interim Statement; NR, not reported; WC, waist circumference

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