

Prevalence of overweight and obesity in incarcerated individuals in developed and developing countries: a systematic review and meta-analysis.

Leonida Nyarwaba Mosomi, Magaly Aceves-Martins, Alexandra M. Johnstone, Baukje de

Roos

The Rowett Institute, University of Aberdeen, AB25 2ZD, United Kingdom

E-mail: b.deroos@abdn.ac.uk

Supporting Information

Table 1. Search strategy

#	Query
1	exp Prisoners/ or exp Prisons/
2	(felon* or jail* or custod* or offender* or inmate* or incarcerat* or gaol* or officer*).ti,ab.
3	1 or 2
4	(nutrition* or nutritional status or body mass or obes* or overweigh or underweigh or body weight).ti,ab.
5	3 and 4
6	limit 5 to humans
7	limit 6 to (" young adult (19 to 24 years)" or "adult (19 to 44 years)" or "young adult and adult (19-24 and 19-44)" or "middle age (45 to 64 years)" or "middle aged (45 plus years)") [Limit not valid in Embase; records were retained]
8	limit 7 to adult <18 to 64 years> [Limit not valid in Ovid MEDLINE(R),Ovid MEDLINE(R) Daily Update,Ovid MEDLINE(R) PubMed not MEDLINE,Ovid MEDLINE(R) In-Process,Ovid MEDLINE(R) Publisher; records were retained]
9	limit 8 to (dutch or english or portuguese or spanish)
10	remove duplicates from 9

Table 2. Risk of Bias Critical Appraisal

STUDY ID Country	Were the criteria for inclusion in the sample clearly defined?	Were the study subjects and the setting described in detail?	Was the exposure measured in a valid and reliable way?	Were objective, standard criteria used for measurement of the condition?	Were confounding factors identified?	Were strategies to deal with confounding factors stated?	Were the outcomes measured in a valid and reliable way?	Was appropriate statistical analysis used?	Overall appraisal total score out of 8
High-Income Countries									
Al-Rousan 2017 ¹⁰ United States	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Johnson 2018 ^{11,64} Canada	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8/8 Good
Lagarigue 2017 ¹² France	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Gates 2015 ¹³ United States	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
D'Souza 2005 ¹⁵ Australia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8/8 Good
Gray 2021 ¹⁶ United Kingdom	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Hannan-Jones 2016 ¹⁷ Australia	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Nucci 2020 ¹⁹ Italy	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Plugge 2009 ²⁵ United Kingdom	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Shaw 1985 ⁴⁰ United States	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Maruschak 2015 ^{36,49} United States	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Rocca 2018 ³⁸ Italy	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Clarke 2012 ⁴⁴ United States	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Lai 2008 ⁴⁵	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8

Taiwan									Good
Befus 2015 ⁵⁰ United States	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7/8 Good
Binswanger 2009 ⁵¹ United States	Yes	Yes	Unclear	Yes	Yes	No	Yes	Yes	6/8 Moderate
Brewer-Smyth 2014 ⁵² United States	Yes	Yes	Unclear	Yes	Yes	No	Unclear	Yes	5/6 Moderate
Brewer-Smyth 2016 ⁵³ United States	Yes	Unclear	Unclear	Yes	Yes	No	Unclear	Yes	4/8 Poor
Camplain 2021 ⁵⁴ United States	Yes	Yes	Unclear	unclear	Yes	No	No	Yes	4/8 Poor
Choudhry 2019 ⁵⁵ United Kingdom	Yes	Yes	Unclear	Yes	Yes	No	Unclear	Yes	5/8 Moderate
Drach 2016 ⁵⁷ United States	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Edwards 2001 ^{58,59} United Kingdom	Yes	Yes	Yes	Yes	Yes	No	Unclear	Yes	6/8 Moderate
Hachbardt 2020 ⁶¹ Italy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8/8 Good
Jacobs 2015 ⁶³ United States	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Khavjou 2007 ⁶⁶ United States	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Kosendiak 2022 ⁶⁸ Poland	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Ekmekcioglu 2015 ⁷¹ Austria	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Leigey 2015 ⁷² United States	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Martínez-Vicente 2014 ⁷³ Spain	No	No	Yes	Unclear	Yes	No	Yes	Yes	4/8 Poor
Nara 1998 ⁷⁵ Japan	Yes	Yes	Yes	Yes	Yes	No	unclear	yes	6/8 Moderate
Nwosu 2014 ⁷⁸ United States	yes	yes	yes	yes	Yes	No	yes	yes	7/8 Good
Ross 2019 ⁸² Australia	Yes	Yes	No	Yes	Yes	No	Unclear	yes	6/8 Moderate
Sioen 2009 ⁸⁴	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8

Belgium									Good
Togas 2014 ⁸⁵ Greece	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8/8 Good
Vera-Remartínez 2014 ⁸⁶ Spain	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	8/8 Good
Voller 2016 ⁸⁷ Italy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8/8 Good
Wright, 2019 ⁸⁹ United Kingdom	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Wolff 2012 ⁹⁰ United States	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Young 2005 ⁹¹ Australia	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Maddan 2008 ⁹² United States	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Martínez-Delgado 2016 ⁹³ Spain	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Saleh 2019 ⁹⁵ United States	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Packham 2020 ⁹⁶ United Kingdom	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Upper-Middle-Income Countries									
Audi 2018 ¹⁸ Brazil	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Rueda 2013 ³⁴ Colombia	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Argüello-González 2020 ³⁹ México	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Bautista-Arredondo 2015 ⁴⁸ Mexico	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Lalem et al., 2015 ⁶⁹ Libya	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Nessier 2012 ⁷⁶ Argentina	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Lower-Middle Income Countries									
Noeske 2011 ⁶ Cameroon	Yes	Yes	Yes	Yes	Yes	No	Unclear	yes	6/8 Moderate
Sharma 2020 ³³	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8

India									Good
Mukhtar 2013 ³⁷ Pakistan	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Gould 2013 ⁴² Papua New Guinea	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Jimoh 2015 ⁴³ Nigeria	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Banu 2010 ⁴⁷ Bangladesh	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Khodabakhshifard 2014 ^{60,67} Iran	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Himwaaba 2021 ⁶² Zambia	Yes	Yes	Yes	no	Yes	Yes	Yes	Yes	7/8 Good
LaMonaca 2018 ⁷⁰ Haiti	Yes	Yes	No	Yes	Yes	No	Yes	Yes	6/8 Moderate
Murad 2014 ⁷⁴ Pakistan	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Noeske 2006 ⁷⁷ Cameroon	Yes	Yes	Yes	Yes	Yes	No	Unclear	Yes	6/8 Moderate
Oyedokun 2018 ⁷⁹ Nigeria	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Rahfiludin 2019 ⁸⁰ Indonesia	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Simeni 2020 ⁸³ Cameroon	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Winetsky 2014 ⁸⁸ Tajikistan	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Ullah 2010 ⁹⁴ Pakistan	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	7/8 Good
Low-Income Countries									
Kayomo 2018 ³⁵ Democratic Republic of the Congo	Yes	Yes	Unclear	Yes	Yes	No	Unclear	Yes	5/8 Moderate
Wondimu 2021 ⁴¹ Ethiopia	Yes	Yes	Unclear	Yes	Yes	No	Unclear	Yes	6/8 Moderate
Abera 2017 ⁴⁶ Ethiopia	Yes	Yes	Unclear	Yes	Yes	No	Unclear	Yes	5/8 Moderate
Diendéré 2021 ⁵⁶ Burkina Faso	Yes	Yes	Unclear	Yes	Yes	No	Unclear	Yes	5/8 Moderate

Kalonji 2021 ⁶⁵ Democratic Republic of the Congo	Yes	Yes	Yes	Yes	Yes	No	Unclear	Yes	6/8 Moderate
Ravaoarisoa 2019 ⁸¹ Madagascar	Yes	Yes	Unclear	Yes	Yes	No	Unclear	Yes	6/8 Moderate