Appendix A: MEDLINE Search Strategy

1. Frail Elderly.sh,kf.

2. (frail* or geriatric syndrome* or geriatric disorder*).ti,ab.

3. ((elder* or old* or senior* or geriatric*) adj4 function* adj4 (declin* or impair*)).af.

4. 1 or 2 or 3

5. Developing Countries.sh,kf.

6. (Africa* or Asia* or Caribbean* or West Indi* or South America* or Latin America* or Central America*).hw,kf,ti,ab,cp.

7. ((developing or less* developed or under developed or underdeveloped or middle income or low* income or underserved or under served or deprived or poor*) adj (countr* or nation? or population? or world)).ti,ab.

8. ((developing or less* developed or under developed or underdeveloped or middle income or low* income) adj (economy or economies)).ti,ab.

9. (low* adj (gdp or gnp or gni or gross domestic or gross national)).ti,ab.

10. (low adj3 middle adj3 countr*).ti,ab.

11. (lmic or lmics or third world or lami countr*).ti,ab.

12. transitional countr*.ti,ab.

13. (Afghanistan or Albania* or Algeria* or Angola* or Antigua or Barbuda or Argentin* or Armenia* or Aruba or Azerbaijan or Bahrain or Bangladesh* or Barbados or Benin or Byelarus or Byelorussian or Belarus or Belorussian or Belorussia or Belize or Bhutan or Bolivia or Bosnia or Herzegovina or Hercegovina or Botswana or Brasil* or Brazil* or Bulgaria* or Burkina Faso or Burkina Fasso or Upper Volta or Burundi or Urundi or Cambodia* or Khmer Republic or Kampuchea or Cameroon or Cameroons or Cameron or Camerons or Cape Verde or Cabo Verde or Central African Republic or Chad or Chile or China or Chinese or Colombia* or Comoros or Comoro Islands or Comores or Mayotte or Congo or Zaire or Costa Rica or Cote d'Ivoire or Ivory Coast or Croatia or Cuba* or Cyprus or Czechoslovakia or Czech Republic or Slovakia or Slovak Republic or Djibouti or French Somaliland or Dominica or Dominican Republic or East Timor or East Timur or Timor Leste or Ecuador or Egypt* or United Arab Republic or El Salvador or Eritrea or Estonia* or Ethiopia* or Fiji or Gabon or Gabonese Republic or Gambia or Gaza or Georgia or Georgian or Ghana or Gold Coast or Greece or Grenada or Grenadines or Guatemala or Guinea or Guam or Guiana or Guyana or Haiti* or Honduras or Hungary or India* or Maldiv* or Indonesia* or Iran* or Iraq* or Isle of Man or Jamaica* or Jordan* or Kazakhstan or Kazakh or Kenya* or Kiribati or Korea* or Kosovo or Kyrgyzstan* or Kirghizia or Kyrgyz Republic or Kirghiz or Kirgizstan or Lao PDR or Laos or Latvia* or Lebanon or Lebanese or Lesotho or Basutoland or Liberia or Libya* or Lithuania* or Macedonia* or Madagascar or Malagasy Republic or Malaysia* or Malaya or Malay or Sabah or Sarawak or Malawi or Nyasaland or Mali or Malta or Marshall Islands or Mauritania or Mauritius or Agalega Islands or Mexic* or Micronesia or Middle East or Moldova or Moldovia or Moldovian or Mongolia* or Montenegro or Morocco or Ifni or Mozambique or Myanmar or Myanma or Burma or Namibia or Nepal* or Netherlands Antilles or New Caledonia or Nicaragua or Niger or Nigeria* or Northern Mariana Islands or Oman or Muscat or Pakistan or Palau or Palestine or Panama or Paraguay or Peru* or Philippines or Philipines or Phillipines or Phillippines or Poland or Portugal or Principe or Puerto Rico or Romania* or Rumania or Roumania or Russia or Russian or Rwanda or Ruanda or Saint Kitts or St Kitts or Nevis or Saint Lucia or St Lucia or Saint Vincent or St Vincent or Grenadines or Samoa* or Samoan Islands or Navigator Island or Navigator Islands or Sao Tome or Saudi Arabia or Senegal or Serbia* or Montenegro or Seychelles or Sierra Leone or Slovenia or Sri Lanka* or Ceylon or Solomon Islands or Somalia* or South Africa* or Sudan* or Suriname or Surinam or Swaziland or Syria or Tajikistan or Tadzhikistan or Tadjikistan or Tadzhik or Tanzania* or Thailand or Thai or Togo or Togolese Republic or Tonga or Trinidad or Tobago or Tunisia* or Turk* or Turkmenistan or Turkmen or Tuvalu or Uganda* or Ukrain* or Uruguay or USSR or Soviet Union or Union of Soviet Socialist Republics or Uzbekistan or Uzbek or Vanuatu or New

Hebrides or Venezuela or Vietnam* or Viet Nam* or West Bank or Yemen* or Yugoslavia or Zambia* or Zimbabwe* or Rhodesia*).hw,kf,ti,ab,cp.

14. 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13

15. 4 and 14

Appendix B: Study Quality Assessment

Authors and year of publication*	Random sample or whole population	Unbiased sampling frame	Adequate sample size (>300 participants)	Used standard measures	Outcomes measured by unbiased assessors	Adequate response rate (70%), refusers described	Confidence interval (CI) for prevalence, subgroup analysis	Study subjects are described	Risk of bias assessment
Tribess et al, 2012[1]	√	×	√	√	×	√,√	×,√	√	5.5
De Andrade et al, 2013[2]	√	√	√	√	×	×,×	×,√	√	5.5
Júnior et al, 2014[3]	√	N/A	×	√	×	√,√	×,√	√	4.5
Pegorari et al, 2014[4]	√	×	√	√	√	√,√	×,√	√	6.5
Corona et al, 2015[5]	√	√	√	√	√	√,×	×,√	√	7.0
Santos et al, 2015[6]	×	×	×	√	√	√,×	×,√	√	4.0
Closs et al, 2016[7]	√	√	√	√	√	×,×	√,√	√	7.0
Mello et al, 2017[8]	√	√	×	√	√	√,×	×,√	√	6.0
de Albuquerque Sousa et al, 2012[9]	√	√	√	√	√	√,×	×,√	√	7.0
dos Santos Amaral et al, 2013[10]	×	×	√	√	√	√,×	×,×	√	4.5
Moreira et al, 2013[11]	√	×	√	√	×	√,√	√,×	√	5.5
Neri et al, 2013[12]	√	√	√	√	√	×,×	×,√	√	6.5
Vieira et al, 2013[13]	√	√	√	√	×	×,√	×,×	√	5.5
Ricci et al, 2014[14]	√	√	√	√	√	√,√	×,√	√	7.5
Silveira et al, 2015[15]	√	√	×	√	×	×,×	×,×	√	4.0
Calado et al, 2016[16]	√	√	√	√	√	√,×	×,√	√	7.0
Augusti et al, 2017[17]	√	√	√	√	√	√,×	×,√	√	7.0
Ferriolli et al, 2017[18]	√	×	√	√	×	√,×	×,√	√	5.0
Grden et al, 2017[19]	√	√	×	√	√	√,×	×,√	√	6.0
Ocampo-Chaparro et al, 2013[20]	√	√	√	√	√	√,×	×,√	√	7.0

Authors and year of publication*	Random sample or whole population	Unbiased sampling frame	Adequate sample size (>300 participants)	Used standard measures	Outcomes measured by unbiased assessors	Adequate response rate (70%), refusers described	Confidence interval (CI) for prevalence, subgroup analysis	Study subjects are described	Risk of bias assessment
Curcio et al, 2014[21]	×	×	√	√	√	×,×	×,√	√	4.5
Samper-Ternent et al, 2016[22]	√	×	√	√	√	×,√	×,√	√	6.0
Garcia-Pena et al, 2016[23]	√	√	√	√	√	√,√	×,√	√	7.5
Sanchez-Garcia et al, 2017[24]	√	√	√	√	√	√,×	×,√	√	7.0
Moreno-Tamayo et al, 2017[25]	√	√	√	√	×	√,√	×,√	√	6.5
Chen et al, 2015[26]	×	×	√	√	√	×,√	×,√	√	5.0
Wu et al ,2017[27]	√	√	√	√	√	√,×	√,√	√	7.5
Dong et al, 2017[28]	√	√	√	√	√	×,×	×,×	√	6.0
Wang et al, 2015[29]	×	×	√	√	√	×, ×	×,√	√	4.5
Badrasawi et al, 2017[30]	√	√	√	√	√	√,√	×,√	√	7.5
Kashikar et al, 2016[31]	√	√	×	√	√	√,√	×,√	√	6.5
Gurina et al, 2011[32]	√	√	√	√	√	×,√	×,√	√	7.0
Alvarado et al, 2008[33]	√	√	√	√	×	√,×	×,√	√	6.0
Aguilar-Navarro et al, 2015[34]	√	√	√	√	√	×,×	×,√	√	6.5
Avila-Funes et al, 2016[35]	√	√	√	√	√	√,√	×,√	√	7.5
Sanchez-Garcia et al, 2014[36]	√	√	√	√	√	N/A	×,√	√	6.5
Akin et al, 2015[37]	√	√	√	√	×	×, ×	×,√	√	5.5
Zhu et al, 2016[38]	√	√	√	√	√	√, √	×, ×	√	7.0
Jotheeswaran et al, 2015[39]	√	N/A	√	√	√	√,×	×,×	√	5.5
Fhon et al, 2012[40]	√	√	×	√	√	√,×	×,√	√	6.0
Agreli et al, 2013[41]	√	√	×	√	×	√,×	×,√	√	5.0
Duarte et al, 2013[42]	√	×	×	√	×	√,×	×,×	√	3.5

Authors and year of publication*	Random sample or whole population	Unbiased sampling frame	Adequate sample size (>300 participants)	Used standard measures	Outcomes measured by unbiased assessors	Adequate response rate (70%), refusers described	Confidence interval (CI) for prevalence, subgroup analysis	Study subjects are described	Risk of bias assessment
Del Brutto et al, 2016[43]	√	N/A	√	√	×	√,√	×,√	√	5.5
Fabricio-Wehbe et al, 2009[44]	√	√	×	√	√	×,×	×,√	√	5.5
Carneiro et al, 2016[45]	√	√	√	√	√	×,×	×,√	√	6.5
Bennett et al, 2013[46]	×	×	√	√	√	×, ×	×,√	√	4.5
Woo et al, 2015[47]	√	√	√	√	√	×, ×	×,√	√	6.5
Hao et al, 2016[48]	√	√	√	√	√	×, ×	√,√	√	7.0
Sathasivam et al, 2015[49]	√	√	√	√	×	√,×	×,√	√	6.0
García-González et al, 2009[50]	√	√	√	√	√	×,×	×,√	√	6.5
Perez-Zepeda et al, 2016[51]	√	√	√	√	√	√,×	×,×	√	6.5
de Leon Gonzalez, 2015[52]	√	×	√	√	×	×,×	×,√	√	4.5
Rosero-Bixby et al, 2009[53]	√	√	√	√	√	×,√	×,√	√	7.0
Galbán et al, 2009[54]	×	×	√	√	×	√,×	×,√	√	4.0
Boulos et al, 2016[55]	√	√	√	√	√	√,×	×,√	√	7.0
Gray et al, 2017[56]	√	√	√	√	√	×,×	×,√	√	6.5
Parentoni et al, 2013[57]	×	×	×	√	×	√,×	×,√	√	3.0
Bastone et al, 2015[58]	×	×	×	√	×	√,√	×,×	√	3.0
Cakmur et al, 2015[59]	×	×	×	√	×	√,×	×, ×	√	2.5
Sampaio et al, 2015[60]	×	×	×	√	×	×,×	×,×	√	2.0
Zainuddin et al, 2017[61]	×	×	×	√	×	×,×	×,√	√	2.5

√- Criteria is satisfied ×- Criteria is not satisfied/ not documented N/A- Not applicable

Appendix C: Characteristics of the studies included in the systematic review of prevalence of frailty and pre-frailty

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants' mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI		Study strengths reported by authors	Study limitations reported by authors
									frailty	pre-frailty		
Tribess et al, 2012[1]	Brazil	Population Study of Physical Activity and Aging (EPAFE), City of Uberaba, Minas Gerais Conducted from May to August 2010	Cross sectional study	622	65	≥ 60 (71.0±7.7) 60-96	Random sampling	Fried phenotype*	19.9	49.8	Socio-demographic characteristics of the elderly in this study are similar to those reported in surveys in Latin America indicates the potential generalization of the present results to other populations.	The measurements of self-perception may have been influenced by the low educational level of participants and their motivational aspects.
De Andrade et al, 2013[2]	Brazil	SABE study (Wave 2-2006) Survivors from baseline study (2000) and new participants of the second wave São Paulo	Cross sectional study with SABE data	1374	59.7	≥ 60	Cluster sampling	Fried phenotype*	8.5	40.7	Use of large representative sample of community dwelling elderly increases the generalizability of results. Frailty has measured using well defined method.	Use of self-reported data on physical activities may introduce biases that are difficult to control.
Júnior et al, 2014[3]	Brazil	Epidemiological study titled Nutritional status, risk behaviours and health conditions of the elderly people of Lafaiete Coutinho-BA Urban area	Cross sectional study	286	54.2	≥ 60	Census of all older adults in the area	Fried phenotype*	23.8	58.7	-	Some instruments used in the study required subjective or self-reported information that can be lead to memory bias.
Pegorari et al, 2014[4]	Brazil	Urban area of the city of Uberaba, MG	Cross sectional observational and analytical household survey	958	64.4	≥ 60 (73.7±6.7)	Stratified proportional sampling	Fried phenotype*	12.8	54.5	Results of the study contribute to deepen knowledge of frailty syndrome among Brazilian elderly	-

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants' mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI		Study strengths reported by authors	Study limitations reported by authors
									frailty	pre-frailty		
Pegorari et al, 2014[4] cont.											individuals and support planning and implementation of interventions and care actions.	
Corona et al, 2015[5]	Brazil	SABE study (Wave 3-2010), Survivors from baseline (2000) and second wave (2006) and new participants of the third wave São Paulo	Cross sectional population based study	1171	65.0	≥ 60	Probabilistic sampling	Fried phenotype*	11.3	50.6	Large population base cohort, with a representative sample of community dwelling older adults from the largest city in Brazil.	-
Santos et al, 2015[6]	Brazil	Database called "Identifying the health disease process enrolled population at the Family Health Units" Pau Ferro, municipality of Jequie/BA Conducted from May to November 2013	Observational cross sectional study	136	75.5	≥60 (72.3±8.4) 60-101	-	Fried phenotype*	16.9	61.8	-	-
Closs et al, 2016[7]	Brazil	Multidimensional Study of the Elderly in the Family Health Strategy (EMI-SUS) Conducted from March 2011 to December 2012	Cross-sectional study	521	64.3	≥60 (68.5 ± 6.8)	Random sampling	Fried phenotype*	21.5 (17.97-25.03)	51.1 (46.81-55.39)	-	The cross-sectional design of the study. Access to the study by immobile or bedridden elderly people was limited as the frailty and geriatric syndromes evaluations were performed in an outpatient setting and not in their own homes.

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants' mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI		Study strengths reported by authors	Study limitations reported by authors
									frailty	pre-frailty		
Mello et al, 2017[8]	Brazil	Survey on Conditions of Health and Use of Health Services in the Territory of Manguinhos, Rio de Janeiro Municipality Manguinhos neighborhood of Rio de Janeiro	Cross-sectional study	137	67.9	≥60 (70.2±7.4)	Probability sampling	Fried phenotype*	12.4	61.3	-	Sample size is small and it represents around 10% of the population of this age group in the region. It is not possible to establish a cause and effect relationship. The grip strength, physical activity and gait speed, have been adapted to fit the local reality of the research, which may lead to some differences when comparing with the results of other studies.
de Albuquerque Sousa et al, 2012[9]	Brazil	FIBRA- urban zone of Santa Cruz city	Cross sectional study	391	61.4	≥ 65 (74.0±6.5) 65-96	Random sampling	Fried phenotype*	17.1	60.1	-	Adapted version of the Minnesota Questionnaire of Physical Activities and Leisure was used in this study as original questionnaire did not match with Brazilian cultural context. The used cut-off point (20th percentile) may be underestimating the physical activity level.

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants' mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI		Study strengths reported by authors	Study limitations reported by authors
									frailty	pre-frailty		
dos Santos Amaral et al, 2013[10]	Brazil	This study is a part of a project titled "Allostatic load, frailty and functionality in the elderly" Neighbourhood Rocas, Natal	Analytical observational cross sectional study	295	67.3	≥ 65 (74.3±6.9) 65-100	-	Fried phenotype*	18.6	55.3	Sample is representative. Low percentage of refusals.	-
Moreira et al, 2013[11]	Brazil	FIBRA- Northern area of the city of Rio de Janeiro Conducted from January 2009 to January 2010	Cross sectional descriptive study	754	66.9	≥ 65 (76.6±6.9)	Inverse random sampling stratified by gender and age	Fried phenotype*	9.5	47.5	-	An adapted version of Minnesota Questionnaire of Physical Activities and Leisure was used in this study. However, it is also problematic as reference activities in the questionnaire are atypical in Brazilian culture. This may lead to errors in estimating the weekly caloric expenditure.
Neri et al, 2013[12]	Brazil	FIBRA Seven cities		3413	67.6	≥ 65	Probability sampling	Fried phenotype*	9.0	51.9	Measures were taken to avoid the systematic distortions of data. i.e. encouraging participation of the elderly, standardization of procedures, instruments and equipment, comprehensive training of staff in all locations, procedures were adopted to ensure greater reliability of data entered in the electronic	More female representation in the study sample limited the generalizability of results. Loss of information during the data collection could affect the reliability of data. Study participation in Ivoti was lower than expected due to the problems of time and transport.
		Belem		720	69.5				10.8	48.2		
		Parnaiba		431		73.9			9.7	55.5		
		Campina Grande		395	70.1				8.9	51.4		
		Pocos de Caldas		388	61.4				9.3	53.4		
		Ermelino Matarazzo, Sao Paulo		384	67.2				8.1	54.9		
		Campinas		898	69.3				7.7	52.2		
		Ivoti		197	70.1				8.6	47.7		

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants' mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI		Study strengths reported by authors	Study limitations reported by authors
									frailty	pre-frailty		
Neri et al, 2013[12] cont.											banks.	Selection of older people without cognitive impairment and required to attend to the data collection site by their own might have introduced the survival bias into the study.
Vieira et al, 2013[13]	Brazil	FIBRA-Belo Horizonte, Minas Gerais State Conducted from December 2008 to September 2009	Population based cross sectional study	601	66.2	≥ 65 (74.3±6.4)	Probability sampling	Fried phenotype*	8.7	46.3	-	Phenotype limits the evaluation of possible frail elderly with cognitive impairment, gait restriction, severe motor sequale. Use of Minnesota Questionnaire of Physical Activities and Leisure is not fitting with the Brazilian cultural context.
Ricci et al, 2014[14]	Brazil	FIBRA- Barueri and Cuiaba urban municipalities	Cross sectional population based study	761	64.3	≥ 65 (71.9±5.9)	Census of older adults in 27 census tracts	Fried phenotype*	9.7	48.0	-	The phenotype used in the study basically comprised of physical frailty and not include other markers such as cognitive decline and psychosocial aspects.
Silveira et al, 2015[15]	Brazil	Uberaba, Minas Gerais Conducted from July to October 2011	Analytical observational cross sectional study	54	59.3	≥ 65 (72.9±6.0)	Random sampling	Fried phenotype*	11.1	46.2	-	-

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants'/ Mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI		Study strengths reported by authors	Study limitations reported by authors
									frailty	pre-frailty		
Calado et al, 2016[16]	Brazil	FIBRA-Ribeirão Preto, state of São Paulo	Cross sectional study	385	64.7	≥65 (73.9 ± 6.5)	Random sampling	Fried phenotype*	9.1	49.6	-	Cross-sectional nature of the study does not allow any temporal relationship between the variables to be established. And also, this design is subject to survival bias, which could lead to underestimation of the associations observed. Study has excluded patients who were already known to be dependent. This may have affect the prevalence of frailty.
Augusti et al, 2017[17]	Brazil	Amparo, in the state of São Paulo	Cross-sectional study	306	60.2	≥65 (72.6± 5.7)	Random sampling	Fried phenotype*	21.5	71.6	-	-
Ferriolli et al, 2017[18]	Brazil	Recife	Cross-sectional study	556	70.6	≥ 65 (73.9±6.8)	Probability sampling	Fried phenotype*	12.1	66.9	-	Cannot establish the causal nexus between the studied variables and frailty due to the cross-sectional design. The method used to assess body composition of older adults is debatable.
		Juiz de Fora		412	69.6	≥ 65 (74.2±6.6)			15.5	63.1		
		Fortaleza		481	67.9	≥ 65 (74.8±7.2)			10.4	63.6		
Grden et al, 2017[19]	Brazil	Area covered by three basic health units belong to the Boa Vista Sanitary District,	Cross-sectional study	243	66.3	≥80 (84.4±3.8)	Proportional stratified sampling	Fried phenotype*	14.8	63.8	-	Cross-sectional design is a limiting factor in evaluating cause and effect relationships.

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants'/ Mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI		Study strengths reported by authors	Study limitations reported by authors
									frailty	pre-frailty		
Grden et al, 2017[19] cont.		in the city of Curitiba, Paraná Conducted from January 2013 to September 2015										This sample only represents the local community, and therefore the results cannot be extrapolated to other territories.
Ocampo-Chaparro et al, 2013[20]	Colombia	Commune 18, City of Cali (urban area) Conducted in 2009	Population based cross sectional study	314	64.3	≥ 60	Single stage cluster sampling	Fried phenotype*	12.7	71.3	-	The study was conducted in a localized area and not in the entire city of Cali. And also study population did not include rural, institutionalized adults. Hence it limited the external validity of the findings
Curcio et al, 2014[21]	Colombia	Four villages located in the coffee growing zone of the Andese mountains, (rural area) Conducted in 2005	Cross sectional study	1878	52.2	≥ 60 (70.9±7.4)	Voluntary participation	Fried phenotype*	12.2	53.0	Sample size is large. Used comprehensive set of measurements. First study that measured the prevalence of frailty in older adults living in rural areas in the Latin American and Caribbean. Established the relationship between frailty, higher prevalence of chronic conditions and disabilities among elderly people in Latin America.	-

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants'/ Mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI		Study strengths reported by authors	Study limitations reported by authors
									frailty	pre-frailty		
Samper-Ternent et al, 2016[22]	Colombia	Data from Salud Bienestar y Enve-Jecimiento (SABE) Bogota study Both urban and rural areas of Bogota Data collected in 2012	Cross sectional survey	1442	61.0	≥ 60 (70.7±7.7)	Probabilistic sampling by clusters with block stratification	Fried phenotype*	9.4	52.4	First population based study of adults over 60 in Colombia to explore the conditions that affect their health and quality of life. Study followed the international guidelines previously used in other capital cities in Latin America and was modified to fit the social and historical situation of Colombia. Used constructs validated in similar populations for assessed frailty previously.	Modification to the frailty phenotype definition could introduce bias to the analysis. Large percentage of cohort from the current study was excluded as there was missing data for construction of frailty and sarcopenia variables (n=558). Excluded individuals were significantly different from study population which could introduce bias to the study. Some data are self-reported so recall bias could affect the results.
Garcia-Pena et al, 2016[23]	Mexico	Mexican Health and Aging Study (MHAS) Wave 3 Conducted in 2012	Secondary analysis	1108	54.6	≥ 60 (69.8±7.6)	Probability sampling	Fried phenotype* Frailty index-32 variables	24.9 27.5	61.0 -	Large comprehensive dataset. Used previously validated frailty classifying tools. (Fried phenotype and frailty index)	The cut-off value to define frailty by frailty index was arbitrary although it was based on previous research. Included 32 deficits in frailty index as self-rated hearing and abdominal pain were not available in the 2012 wave.

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants'/ Mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI		Study strengths reported by authors	Study limitations reported by authors
									frailty	pre-frailty		
Garcia-Pena et al, 2016[23] cont.												Categorization of physical activity in Fried phenotype was different from previous reports.
Sánchez-García et al, 2017[24]	Mexico	Baseline assessment ''Cohort of Obesity, Sarcopenia and Frailty of Older Mexican Adults'' (COSFOMA) Mexico city Conducted from April to September 2014	Cross-sectional analysis	1252	59.9	≥60 (68.5 ± 7.2)	Random sampling	Fried phenotype*	11.2	50.3	-	Cross-sectional design does not establish a causal relationship between frailty and quality of life in the elderly.
Moreno-Tamayo et al, 2017[25]	Mexico	Rural Frailty Study (Prospective study) Follow up data collected in 2013	Cross-sectional study	657	52.9	≥70 (76.3 ± 3.3)	Random sampling	Fried phenotype*	11.9	51.9	Use of Fried's phenotype frailty assessment.	Cross-sectional design does not allow for drawing conclusions about the direction of causality.
Chen et al, 2015[26]	China	Data from a cross sectional study, Comprehensive Geriatric Assessment and Health Care Service Study Chengdu and Suining, Southwest China Conducted from October 2010 to August 2012	Cross sectional study	604	57.9	≥ 60 (70.6±6.8) 60-91	Convenience sampling	Fried phenotype*	12.7	56.5	-	Data must be interpreted with caution. The number of the participants was below 1000, although the study population was representative of the 60+ year old community dwelling adults in this specific area. The information about disease and some of the frailty items measurements were taken through

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants'/ Mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI		Study strengths reported by authors	Study limitations reported by authors
									frailty	pre-frailty		
Chen et al, 2015[26] cont.												self-reported questionnaires. Older people who refused to participate had lower level of functionality which might have nonresponse bias or selection bias. Present study has only included Han people. Therefore, conclusions might not generalizable to other ethnic populations.
Wu et al, 2017[27]	China	The China Health and Retirement Longitudinal Study 28 provinces in China (2011-2012)	Baseline survey of an ongoing longitudinal study	5290	49.0	≥60 (69.2±7.0)	Multistage probability sampling	Fried phenotype*	6.3	51.3	First study that utilized the Fried phenotype of frailty scale to examine prevalence of frailty in a nationally representative sample of noninstitutionalized Chinese adults aged 60 years or older. Constructed cut-points for define five physical frailty phenotype criteria in Chinese elders. First study that examined the regional variation	This study does not include the nursing home residents. Therefore, there is a possibility of underestimating the prevalence of frailty among the entire Chinese elderly population. However, it is worthy to note that only 1.5% of older adults live in nursing homes in China. All five frailty components were only measured once; these measures may vary over time.

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants'/ Mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI		Study strengths reported by authors	Study limitations reported by authors
									frailty	pre-frailty		
Wu et al, 2017[27] cont.											in frailty in mainland China. First study that investigated the association of biomarkers with frailty among Chinese older adults.	Unable to establish a causal association of chronic conditions and disability with frailty because the study is a cross-sectional analysis
Dong et al, 2017[28]	China	Jinan City, Shandong Province, Eastern China Conducted from July to December 2016	Cross-sectional study	1188 1215	69.1 69.5	≥60 (69.5±6.7) 60-95	Multistage stratified sampling	Fried phenotype*	3.9 17.4	45.9 21.5	-	Generalizability of the results should be treated cautiously because the participants were just from one city in China.
Wang et al, 2015[29]	China	Changsha city and its surrounding area Conducted from August 2012 to August 2014	-	316	48.1	≥ 65 (75.6±4.8) (men) (76.9±5.2) (women)	-	Fried phenotype*	14.2	49.1	Participants were recruited from a community based elderly population.	Individuals were originally excluded if unable to walk without assistance of another person, or their renal function and liver function is abnormal, or their heart function classification is grades III and IV according to New York Heart Association standard. This may have biased the results towards an underestimation of the risk of frailty associated with sarcoosteopenia
Badrasawi et al, 2017[30]	Malaysia	Neuroprotective model for healthy longevity among Malaysian older adults	Part of a longitudinal study	473	55.6	≥60 (68.2±5.8)	Multistage random sampling	Fried phenotype*	8.9	61.7	-	Use of original Fried's cut-off values for grip strength and gait speed.

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants'/ Mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI frailty	pre-frailty	Study strengths reported by authors	Study limitations reported by authors
Badrasawi et al, 2017[30] cont.		Conducted from 5th July 2013 to 22nd February 2014										Causal relationships should be interpreted with caution since the study is cross-sectional.
Kashikar et al, 2016[31]	India	Warje-Karvenagar, Pune city	Cross-sectional study	250	50.0	≥65 (73.9± 6.4)	Multi stage random sampling	Fried phenotype*	26.0	63.6	-	-
Gurina et al, 2011[32]	Russia	Data from "Crystal" prospective cohort study Kolpino district of St. Petersburg Conducted from March to December 2009	Cross sectional study	611	71.7	≥ 65 (75.1±5.9)	Random sample stratified by age	Fried phenotype* (whole study population)	21.1	63.0	Analysis provides a better understanding of the health status of older adults in Russia.	Cross sectional analysis is not adequate for frailty analysis as this phenotype is more dynamic than static. The prognostic significance of the different frailty indicators and models will become clearer after the follow up data are analysed. The tested frailty models were modified by using proxies for some of the original indicators. Findings can be generalized to the whole population of St. Petersburg only with caution, the Kolpino district represents one of the 18 districts of the city.
								Fried phenotype* (adjusted for MMSE score <18, Parkinson's disease, and stroke)	17.9	65.5		
								Steverink–Slaets model, Groningen Frailty Indicator	32.6	24.7		
								Extended Puts model	43.9	42.9		

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants'/ Mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI frailty	pre-frailty	Study strengths reported by authors	Study limitations reported by authors
Alvarado et al, 2008[33]	Barbados Brazil Chile Cuba Mexico	Health, Wellbeing and Ageing study (SABE) study Conducted from 1999 to 2000	Multi centric cross sectional study	7334	-	≥ 60	Multi-staged sampling	Fried phenotype†	-	-	-	Operationalization of Fried phenotypic criteria is different from the original Cardiovascular Health Study (CHS) of Fried et al, 2001. And also, possible background risk differences (cultural and other social biological factors) may limit the comparison of this study results with other studies.
		Bridgetown, Barbados		1446	61.1				26.7	54.4		
		São Paulo, Brazil		1879	59.3				40.6	48.8		
		Santiago de Chile, Chile		1220	66.1				42.6	51.4		
		Havana, Cuba		1726	62.7				39.0	51.6		
		Mexico, DC, Mexico		1063	60.4				39.5	49.0		
Aguilar-Navarro et al, 2015[34]	Mexico	Subset from Mexican Health and Aging Study (MHAS) Wave 1 Conducted in summer of 2001	Longitudinal study (cross sectional data)	5644	53.6	≥ 60 (68.7±6.9)	Random sample	Fried phenotype†	37.2	51.3	Population based design. Large sample size.	Operationalization of Fried phenotypic criteria is different from the original CHS of Fried et al, 2001. The original metrics were not available in the MHAS cohort. It could results possible overestimation of prevalence of frailty.
Avila-Funes et al, 2016[35]	Mexico	Subset of Mexican Study of Nutritional and Psychosocial Markers of Frailty (prospective cohort study) Coyoacán cohort Conducted from April 2008 to July 2009	Cross-sectional study using the data of prospective cohort study	927	54.9	≥ 70 Median age-76.5 70.3-104.4	Random sampling stratified by age and sex	Fried phenotype†	14.1	37.3	Population based sample, from a cohort specifically designed to identify the correlates of frailty.	Recruitment was carried out in only one district of Mexico city, therefore these results might not be representative of rural areas of Mexico.

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants/ Mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI		Study strengths reported by authors	Study limitations reported by authors
									frailty	pre-frailty		
Sanchez-Garcia et al, 2014[36]	Mexico	Data from Study on Aging and Dementia in Mexico (SADEM) Conducted from September 2009 to March 2010	Not mentioned in the article	1933	58.0	≥ 60 70.1±7.1 (women) 71.7±7.4 (men)	Random sample from original database	Fried phenotype‡	15.7	33.3	-	Definitions used to evaluate frailty and pre-frailty.
Akin et al, 2015[37]	Turkey	Kayseri (urban area) Data of Kayseri Elderly Health Study (KEHES) Kayseri Conducted from August to December 2013	Cross sectional population based study	848 897	50.6	≥ 60 (71.5±5.6)	Stratified random sampling and any Individual older than 60 years who requested to participate was also included.	Fried phenotype‡ FRAIL scale	27.8 10.0	34.8 45.6	-	Absence of physical activity in this study may have under or overestimated the prevalence of frailty. Relatively small sample size of elderly participants aged ≥ 85 years.
Zhu et al, 2016[38]	China	Cross sectional data from the ageing arm of the Rugao Longevity and Ageing Study 31 villages in Jiang'an township, Rugao city Conducted from November 2014 to December 2014	-	1478	53.0	≥ 70 (75.3±3.9) 70-84	Random sampling	Fried phenotype‡	12.0	42.9	Representativeness of the study participants increases the generalisability of the findings. The study participants were randomly selected with a higher participant rate (91.2%) representing approximately 16% of the elderly in Jiang'an township. The Findings from such a representative population based sample might be generalisable to most elderly people in China.	-

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants/ Mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI frailty	pre-frailty	Study strengths reported by authors	Study limitations reported by authors
Jotheeswaran et al, 2015[39]	China Mexico Peru Cuba Dominican Republic Venezuela India	10/66 Dementia Research Group's (10/66 DRG) population based studies of ageing and dementia in LMICs Data collected between 2003 and 2007	Cross sectional survey	12373	62.3	≥ 65 (74.1±7.0)	Census	Fried phenotype‡	17.5	-	Study was conducted with large population based cohorts in Latin America, India and China allowing to assess the consistency or cultural specificity of the observed associations. Study design was prospective, limiting information bias with modest attrition. Walking speed, under nutrition and cognitive impairment were measured objectively. Visual and auditory impairment have been assessed by objective testing.	Hand grip strength was not measured in this study. Hence physical frailty construct is only an approximation to the original Fried definition. The impact of this omission is difficult to assess.
								Multi dimentional frailty model	29.1	-		
								Fried phenotype‡				
		China (Urban)		989	56.6	(74.1±6.3)			7.8	-		
		China (Rural)		1002	55.5	(72.4±6.0)			8.7	-		
		Cuba (Urban)		2637	65.0	(75.2±7.1)			21.0	-		
		Dominican Republic (Urban)		1706	66.3	(75.4±7.6)			34.6	-		
		India (Urban)		748	57.2	(71.4±6.1)			11.4	-		
		Mexico (Urban)		909	66.5	(74.4±6.6)			10.1	-		
		Mexico (Rural)		933	60.9	(74.1±6.6)			8.5	-		
		Peru (Urban)		1245	64.7	(75.0±7.4)			25.9	-		
		Peru (Rural)		507	53.2	(74.1±7.3)			17.2	-		
		Venezuela (Urban)		1697	63.2	(72.3±6.8)			11.0	-		
		China (Urban)		989	56.6	(74.1±6.3)		Multi dimentional frailty model	11.3	-		
		China (Rural)		1002	55.5	(72.4±6.0)			22.5	-		
		Cuba (Urban)		2637	65.0	(75.2±7.1)			33.7	-		
		Dominican Republic (Urban)		1706	66.3	(75.4±7.6)			47.8	-		
		India (Urban)		748	57.2	(71.4±6.1)			26.1	-		
		Mexico (Urban)		909	66.5	(74.4±6.6)			22.9	-		
		Mexico (Rural)		933	60.9	(74.1±6.6)			36.2	-		
		Peru (Urban)		1245	64.7	(75.0±7.4)			28.2	-		
		Peru (Rural)		507	53.2	(74.1±7.3)			25.6	-		
		Venezuela (Urban)		1697	63.2	(72.3±6.8)			20.0	-		

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants/ Mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI		Study strengths reported by authors	Study limitations reported by authors
									frailty	pre-frailty		
Fhon et al, 2012[40]	Brazil	Municipality of Ribeirao Preto, Sao Paulo Conducted from November 2010 to February 2011	Cross sectional study	240	62.9	≥ 60 (73.5±8.4)	Two stage conglomerate sampling	Edmonton frail scale	39.2	24.6	-	-
Agreli et al, 2013[41]	Brazil	Embu, City in metropolitan region of Sao Paulo Conducted from June to July 2010	Observational descriptive cross sectional study	103	62.1	≥ 60 (68.9±7.8) 60-103	Simple random sampling	Edmonton frail scale	30.1	22.3	-	Older adults who did not respond to the clock test could not classify for their degree of frailty.
Duarte et al, 2013[42]	Brazil	This study is a sub project of the survey "Living conditions, health and ageing: a comparative study" City of Joao Pessoa, the state capital of Paraiba Conducted from April to June 2011	Cross sectional study	166	100.0	≥ 60 (73.0±6) 60-96	Two staged cluster sampling	Edmonton frail scale	39.2	21.7	-	-
Del Brutto et al, 2016[43]	Ecuador	Atahualpa, a rural village of costal Ecuador	Cross sectional population based study	298	57.0	≥ 60 (70.0±8.0)	Individuals identified through yearly door-to-door survey	Edmonton frail scale	31.2	22.0	Population based design. Lack of selection bias. Used a reliable instrument to identify frailty.	-
Fabricio-Wehbe et al, 2009[44]	Brazil	Ribeirao Preto, Sao Paulo Conducted from September 2007 to June 2008	-	137	74.5	≥ 65 (75.3±8.0) 65-100	Probabilistic sampling	Edmonton frail scale	31.4	20.4	-	-
Carneiro et al, 2016[45]	Brazil	City of Montes Claros, northern Minas Gerais Conducted from May to July 2013	Cross-sectional study	511	64.0	≥65 (74.0± 7.1)	Two stage cluster sampling	Edmonton frail scale	41.3	-	Representative sample.	Losses or refusals were compensated by adding new older adults. However, more active older adults

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants/ Mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI frailty	pre-frailty	Study strengths reported by authors	Study limitations reported by authors
Carneiro et al, 2016[45] cont.												who were probably without frailty were not found at home during the visits. This can limit the generalizability of the data. This is a cross-sectional study and cannot establish the temporal relationship among the observed associations.
Bennett et al, 2013[46]	China	Longevity Study (CLHLS) 22 provinces of China	Secondary analysis	6300	-	80-99	-	Frailty index 38 deficits	FI≤ 0.05-15.0 0.05< FI≤ 0.15-53.2 0.15< FI≤ 0.25-20.2 0.25< FI≤ 0.35-6.7 0.35< FI≤ 0.45-3.3 FI >0.45-1.6		-	The baseline cohort included 36% centenarians and they have been excluded from the analysis. Hence, results should be interpreted with caution.
Woo et al, 2015[47]	China	Data from Beijing Longitudinal Study of Aging II (BLSA II) Three urban districts (Xuanwu, Xicheng and Dongcheng) and one rural county (Shunyi) from the 18 administrative districts or counties in Beijing Participants were recruited from July to November 2009	-	6320 (urban) 978 (rural)	61.5 57.2	≥ 65 74.6±5.6 (men) 73.8±5.2 (women) (74.8±5.7) (men) (73.9±5.0) (women)	Multistage cluster sampling	Frailty index 34 variables	17.0 5.2	- -	-	-

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants/ Mean age/Age range (years)	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI frailty	pre-frailty	Study strengths reported by authors	Study limitations reported by authors
Hao et al, 2016[48]	China	Data from Project of Longevity and Aging in Dujiangyan Dujiangyan region, Sichuan province	Cross sectional study	767	68.0	≥ 90 (93.7±3.4) 90-108	Based on a census of older people above 90 years	Frailty index 35 variables	61.8	-	Frailty index does not rely on specific set of variables. Hence evaluation of frailty is more feasible.	Data needed to be interpreted with caution. The number of participants who gave the consent is still limited. The study population clearly represent a survivor group.
Sathasivam et al, 2015[49]	Malaysia	Urban district	Multistage cross sectional study	789	59.4	≥ 60 (69.6±7.2)	Multi stage random sampling	Frailty index 40 variables	5.7	67.7	Population based study.	There are no normative values that have been consensually established to date to define severity of frailty levels in Malaysia. Findings cannot be generalised to other ethnic groups from similar middle income countries.
García-González et al, 2009[50]	Mexico	Mexican Health and Aging Study (MHAS) Wave 1	Follow up study	4082	52.5	≥65 (73.0)	Probabilistic sample	Frailty index (FI) -34 variables	5 FI levels .00-.07-17.4 .07-.14-30.8 .14-.21-24.0 .21-.35-21.4 .35-.65-6.5		-	-
Perez-Zepeda et al, 2016[51]	Mexico	Data from nationwide survey representing urban and rural areas, Mexican Survey on Nutrition and Health (ENSANUT), 2012	Cross sectional analysis	7108	54.7	≥ 60 (70.7±8.1)	Multistage stratified sampling	Frailty index-44 variables	45.2	-	-	-

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants/ Mean age	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI		Study strengths reported by authors	Study limitations reported by authors
									frailty	pre-frailty		
de Leon Gonzalez, 2015[52]	Mexico	Mexican Health and Aging Study (MHAS) Wave 1	-	4729	-	≥60	-	FRAIL scale	10.4	44.8	Large sample size of men and women living in the community.	Participants who did not complete the performance measures in the population study, and did not include in the present analysis are expected to be less healthy and more likely to die. This increases the possibility of survival bias.
Rosero-Bixby et al, 2009[53]	Costa-Rica	Costa Rican Study on Longevity and Healthy Aging (CRELES)	-	2704	-	≥ 60	Random sampling	Physical frailty using five physical tests	17.8 (60-79 years 57.0 (80+ years)	- -	-	-
Galban et al, 2009[54]	Cuba	Antonio Maceo, Cerro municipality, Havana, Cuba Data collected in 2005	Observational descriptive cross sectional study	541	58.0	≥ 60	-	Geriatric Functional Assessment Scale was applied to classify the participants to frail and non-frail groups according to Cuban frailty criteria	51.4	-	-	-
Boulos et al, 2016[55]	Lebanon	Rural areas Conducted from March 2011 to 2012	Cross sectional study	1120	50.8	≥ 65 (75.7±7.1)	Multi staged cluster sampling	Study of Osteoporotic Fractures (SOF) frailty index	36.4	30.4	Results may be generalisable to rural Lebanese elderly as study involved large representative sample with high response rate. This is the first study reporting estimates about	First part of questionnaire was based on self-reported information which might be affected by memory and education bias due to educational disparities.

Authors and year of publication*	Country	Data source/study setting/time period	Study design	Effective sample	Female %	Participants/ Mean age	Sampling technique	Frailty assessment method	Prevalence (%), 95% CI frailty	Pre-frailty	Study strengths reported by authors	Study limitations reported by authors
Boulos et al, 2016[55] cont.											frailty and associated factors in elderly Lebanese community dwellers. Data collection for frailty was based on a widely used and well validated instrument.	Cognitive impairment might affect the accuracy of the SOF index and underestimate the frailty. Widely used Fried phenotype was not used in this study due to the difficulty of performing the walking test (possible space constraints and lack of standardized conditions in Lebanese rural households.)
Gray et al, 2017[56]	Tanzania	Six villages in the rural Hai District of northern Tanzania	Follow up cohort	941	55.8	≥70 (77.2± 6.4)	Census of selected villages	Brief Frailty Instrument for Tanzania (B-FIT)	4.6	13.4	The screening tool could be administered without the need of any specialist knowledge or training and may be suited for use in low-resource settings.	The B-FIT requires further assessment of its face, content, and constructs validity, and the inclusion of a broader range of items should be considered.

*Fried phenotype with five criteria-weakness and slowness assessed using objective tests
†Fried phenotype with five criteria-weakness and slowness assessed using self-reported questions (subjective)
‡Fried phenotype with four criteria

References for the tables in appendix B and C are listed at the end of this document.

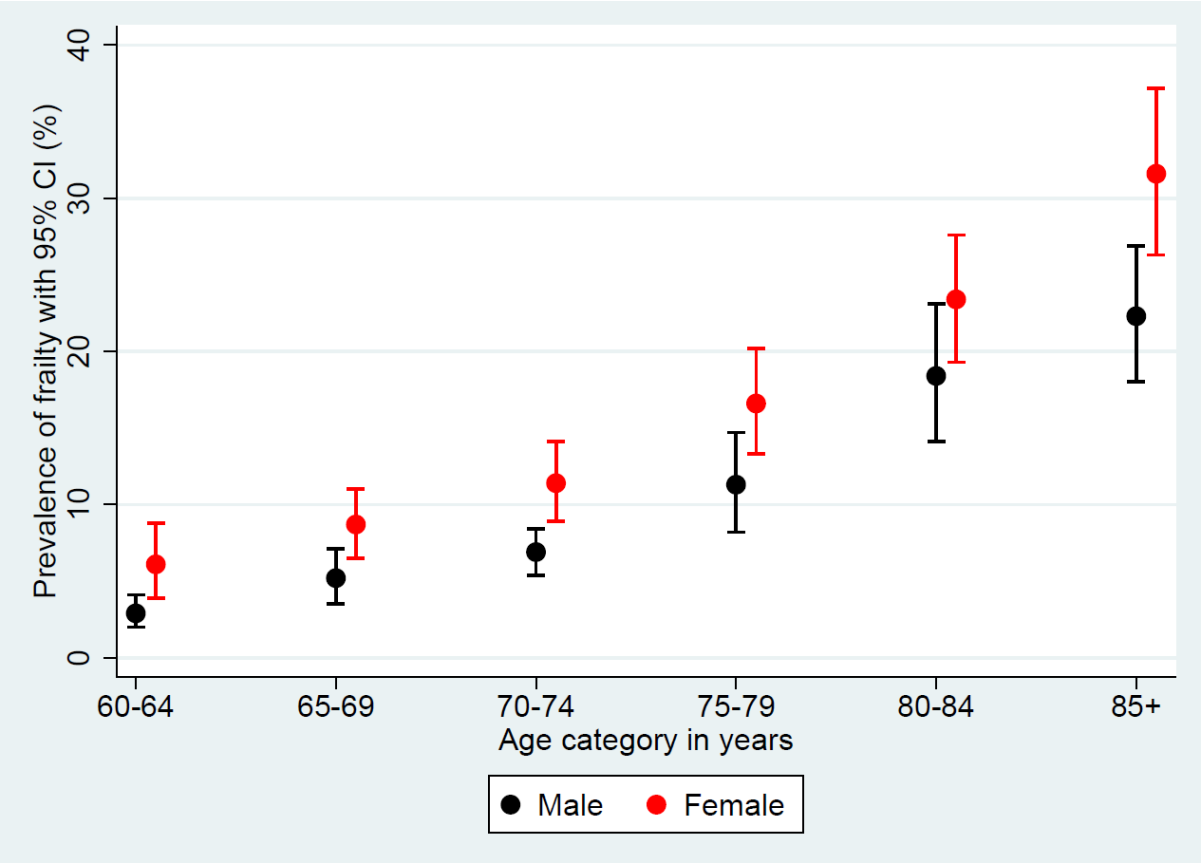
Appendix D: Random effects pooled prevalence of frailty and prefrailty stratified by frailty assessment method

Frailty assessment method	Number of studies (estimates)	Number of participants	Pooled prevalence (%)	95% CI (%)	Cochran's Q	Degrees of freedom	p value	I^2 (%)
Frailty								
Fried phenotype with 5 criteria-weakness and slowness assessed using objective tests	30 (38)	27623	12.7	10.9-14.5	709.9	37	<0.001	94.8
Fried phenotype with 5 criteria-weakness and slowness assessed using self-reported questions (subjective)	3 (7)	13905	33.8	27.6-40.4	359.1	6	<0.001	98.3
Fried phenotype with only 4 criteria	4 (13)	16632	15.6	11.4-20.3	772.1	12	<0.001	98.4
Edmonton Frail Scale	6 (6)	1455	35.9	31.7-40.2	13.1	5	0.022	61.9
Frailty index	4 (5)	16303	18.0	5.8-35.0	2085.5	4	<0.001	99.8
FRAIL scale	3 (3)	6841	12.4	8.4-17.1	Not computed	2	<0.001	Not computed
Multi-dimensional frailty model	1 (10)	12373	26.9	20.6-33.8	628.8	9	<0.001	98.6
Pre-frailty								
Fried phenotype with 5 criteria-weakness and slowness assessed using objective tests	30 (38)	27623	55.2	53.3-57.1	360.6	37	<0.001	89.7
Fried phenotype with 5 criteria-weakness and slowness assessed using self-reported questions (subjective)	3 (7)	13905	49.2	46.0-52.4	79.5	6	<0.001	92.5
Fried phenotype with only 4 criteria	3 (3)	4259	37.0	30.9-43.3	Not computed	2	Not computed	Not computed
Edmonton Frail Scale	5 (5)	944	22.3	19.7-25.0	1.0	4	0.907	0.0
FRAIL scale	3 (3)	6841	38.9	27.6-50.7	Not computed	2	Not computed	Not computed

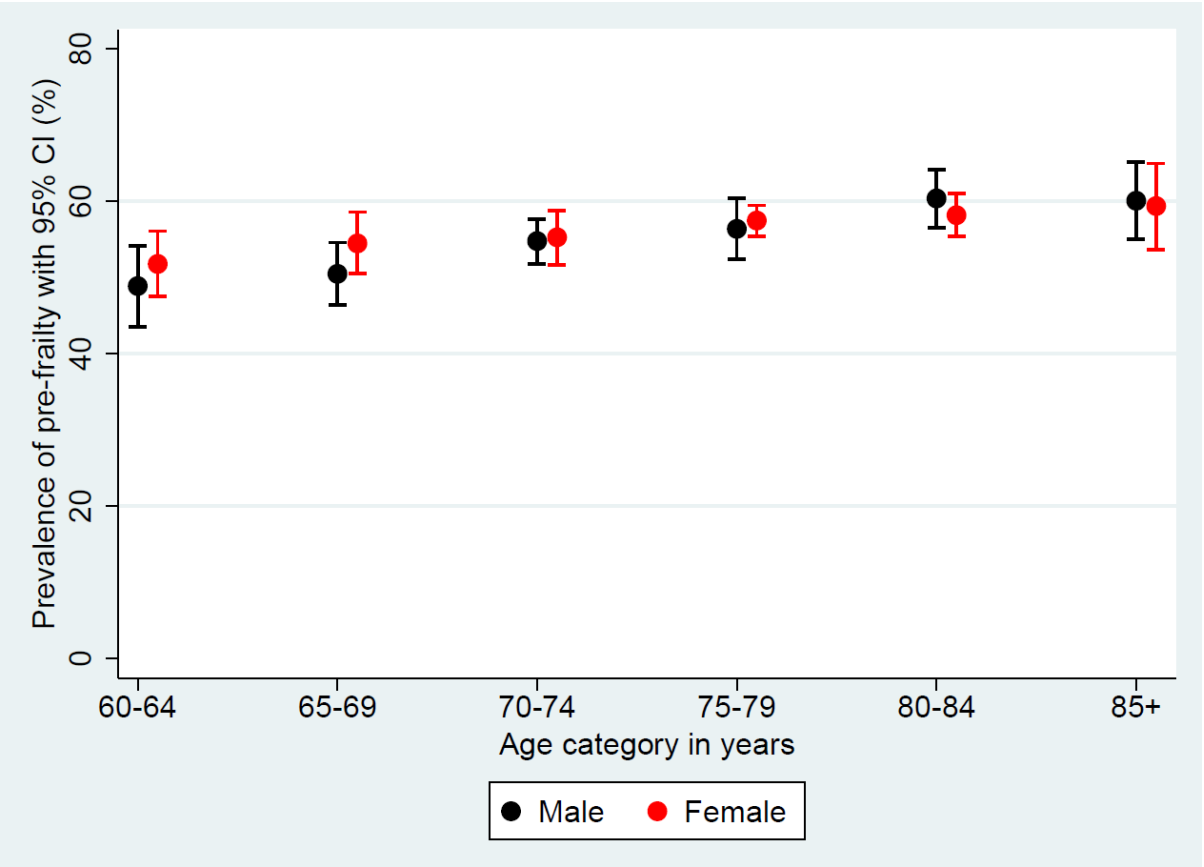
Appendix E: Pooled prevalence of frailty and prefrailty by five years age categories for studies used Fried phenotype with five criteria where weakness and slowness assessed using objective tests

Age category	Number of studies	Number of participants	Pooled prevalence (%)	95% CI (%)	Cochran's Q	Degrees of freedom	p value	I^2 (%)
Frailty								
60-64	13	4386	6.2	4.0-8.8	100.4	12	<0.001	88.1
65-69	21	6437	8.2	6.3-10.3	138.2	20	<0.001	85.5
70-74	22	5666	10.3	8.2-12.6	136.4	21	<0.001	84.6
75-79	22	4121	15.4	12.6-18.4	115.6	21	<0.001	81.3
80-84	22	2329	22.6	18.5-26.9	97.7	21	<0.001	78.5
85+	22	1249	29.8	25.6-34.2	42.1	21	0.004	50.1
Pre-frailty								
60-64	13	4386	52.3	47.9-56.8	86.7	12	<0.001	86.2
65-69	21	6437	53.5	49.8-57.1	148.1	20	<0.001	86.5
70-74	22	5666	54.8	51.6-57.9	100.6	21	<0.001	79.1
75-79	22	4121	57.0	55.0-59.1	30.6	21	0.080	31.5
80-84	22	2329	57.9	55.5-60.3	25.8	21	0.213	18.7
85+	22	1249	59.3	55.9-62.6	25.4	21	0.229	17.4

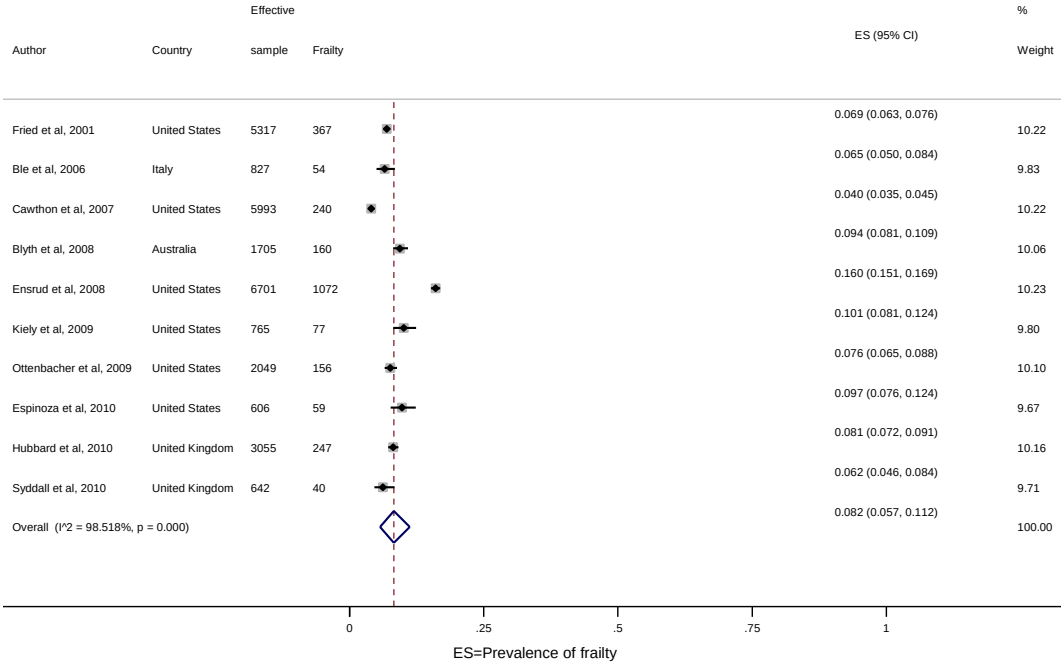
Appendix F: Pooled prevalence of frailty by age and sex for studies using all five Fried phenotype criteria with objective assessment for weakness and slowness



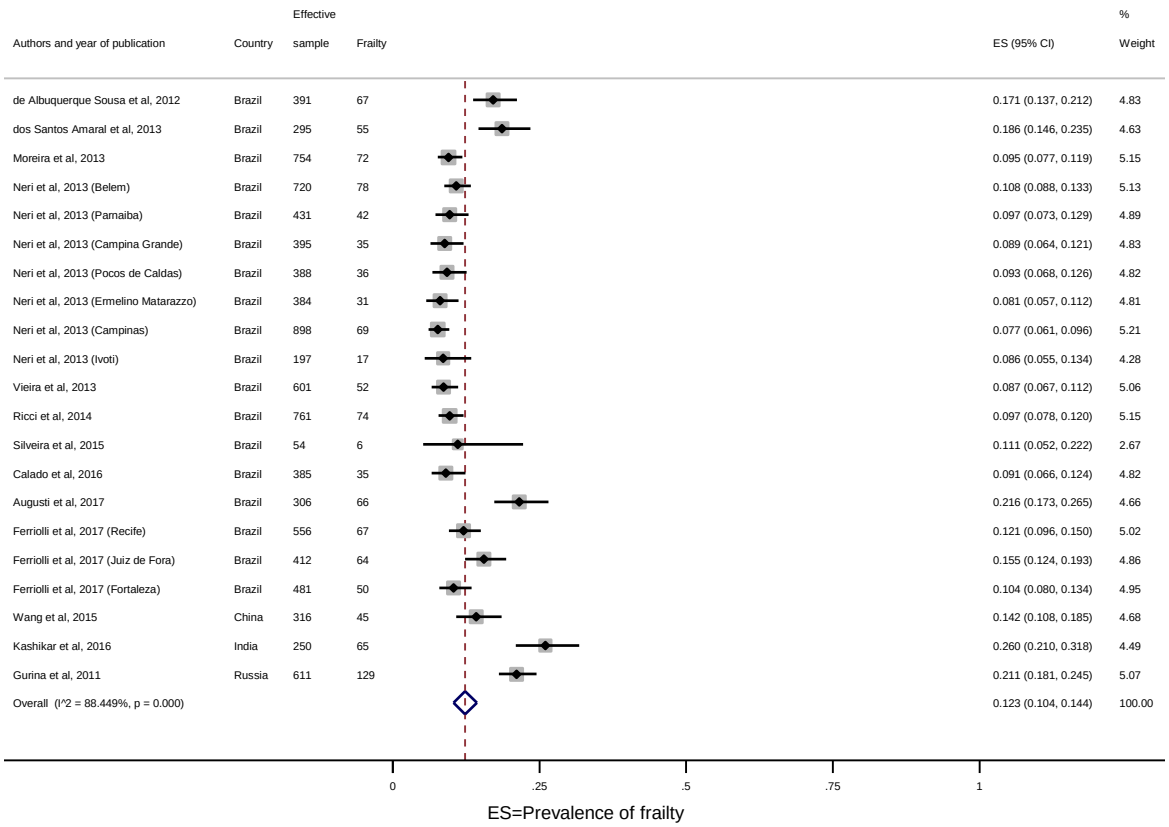
Appendix G: Pooled prevalence of prefrailty by age and sex for studies using all five Fried phenotype criteria with objective assessment for weakness and slowness



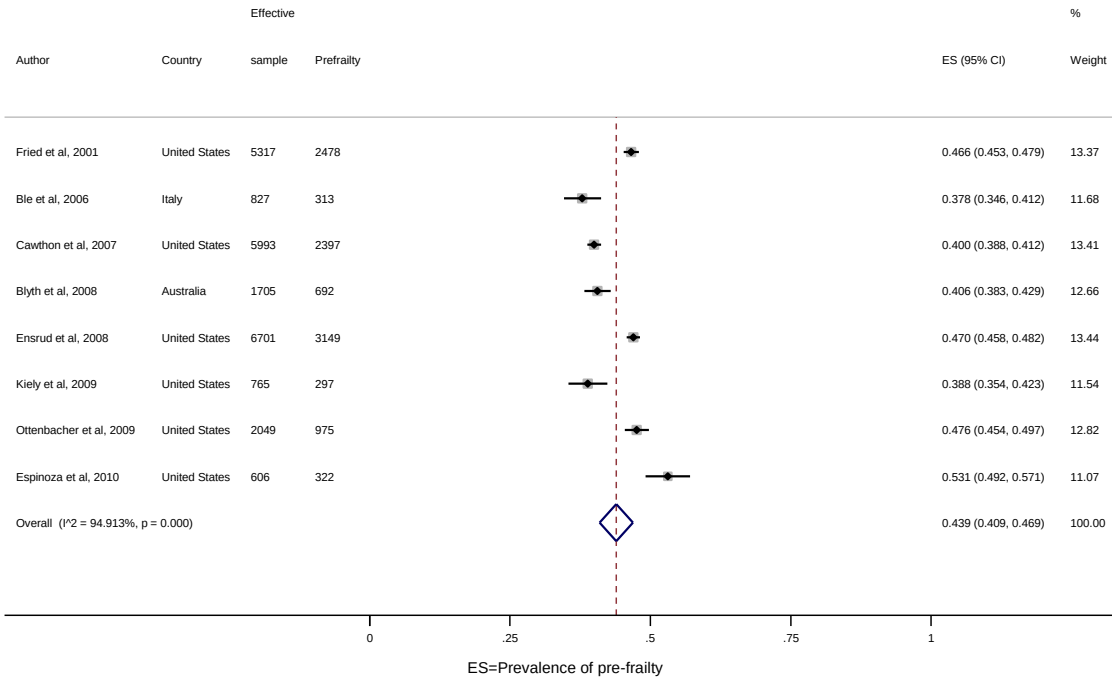
Appendix H: Random effects pooled prevalence of frailty among community dwelling older adults in high income countries



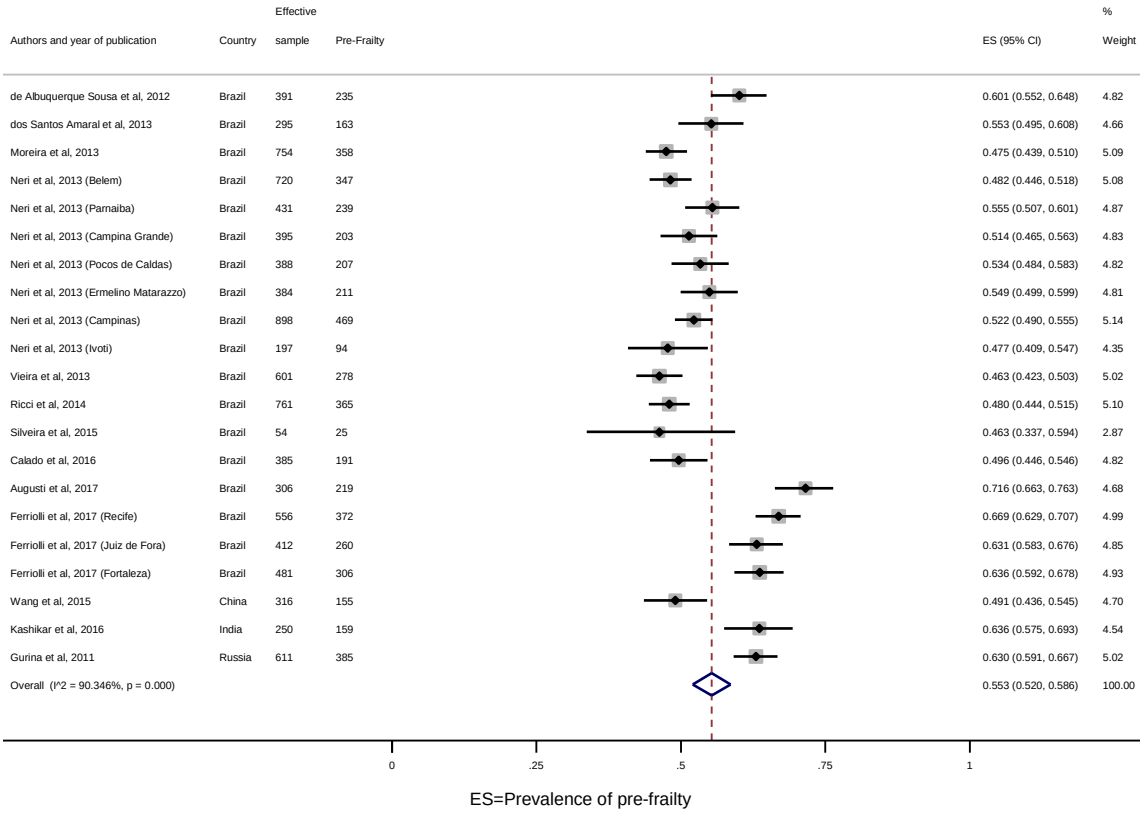
Appendix I: Random effects pooled prevalence of frailty among community dwelling older adults in middle income countries (only with the studies of minimum recruitment age 65 years)



Appendix J: Random effects pooled prevalence of prefrailty among community dwelling older adults in high income countries



Appendix K: Random effects pooled prevalence of prefrailty among community dwelling older adults in middle income countries (only with the studies of minimum recruitment age 65 years)



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