**SUPPLEMENTARY DIGITAL CONTENT**

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# ONLINE ONLY TABLE

## eTable 1: Table of excluded studies

|  |  |
| --- | --- |
| **Study** | **Reason for exclusion** |
| Cezaretto 2012[1] | Control group received some intervention |
| Jeemon 2012[2] | Non-random allocation |
| Jiang 2002[3] | Quasi-experimental study |
| Jiang 2010 [4] | Quasi-experimental study |
| Jordan 2008 [5] | Non-random allocation |
| Joshi 2012 [6] | People with CVD at baseline and no relevant outcomes reported |
| Kelishadi 2010 [7] | Non-random allocation |
| Kelishadi 2011 [8] | Non-random allocation |
| Kelishadi 2012 [9] | Non-random allocation |
| Kozlov 1997 [10] | Secondary prevention of CVD |
| Lafay 2006 [11] | No relevant outcome reported |
| Molazem 2013 [12] | Secondary prevention |
| Moreira 2005 [13] | Quasi-experimental study |
| Naser 2008 [14] | Secondary prevention |
| Pahkala 2013 [15] | Participants with congenital heart disease |
| Prabhakaran 2009 [16] | Non-random allocation |
| Rabiei 2010 [17] | Non-random allocation |
| Sarrafzadegan 2013 [18] | Quasi-experimental study |
| Satpute 2009[19] | Both groups received an intervention |
| Seligman 2011 [20] | Both groups received an intervention |
| Shahamfar 2010 [21] | Secondary prevention |
| Shehu 2013 [22] | Non-random allocation |
| Singh 2002 [23] | Secondary prevention |
| Siqueira-Catania 2013 [24] | Both groups received an intervention |
| Steinbach 1982 [25] | Non-random allocation |
| Steinbach 1982 [26] | Non-random allocation |
| Steinbach 1984 [27] | Non-random allocation |
| Sun 2013 [28] | Non-random allocation |
| Suwanphan 2009 [29] | Non-random allocation |
| Torres 2011 [30] | Non-random allocation |
| Tsao 2007 [31] | Non-random allocation |
| Tu 1999 [32] | Both groups received an intervention |
| Wang 2002 [33] | People with CVD at baseline |
| Yao 2009 [33] | People with CVD at baseline |
| Zhang 2012 [33] | Secondary prevention |

1. Cezaretto A, Siqueira-Catania A, De Barros CR, Salvador EP, Ferreira SR: **Benefits on quality of life concomitant to metabolic improvement in intervention program for prevention of diabetes mellitus.** *Quality of Life Research* 2012, **21:**105-113.

2. Jeemon P, Prabhakaran D, Goenka S, Ramakrishnan L, Padmanabhan S, Huffman M, et al: **Impact of comprehensive cardiovascular risk reduction programme on risk factor clustering associated with elevated blood pressure in an Indian industrial population.** *Indian Journal of Medical Research* 2012, **135:**485-493.

3. Jiang B, Wang W, Wu S, Hong Z: **[Changes of both knowledge levels and health-related behaviors of preventing cardio-cerebro-vascular diseases in population after intervention].** *Wei Sheng Yen Chiu/Journal of Hygiene Research* 2002, **31:**199-202.

4. Jiang G, Li J, Wang Z, Li W, Wang D, Liu H, et al: **[Applying a "stage of behaviors change" model on nutrition intervention in farmers].** *Wei Sheng Yen Chiu/Journal of Hygiene Research* 2010, **39:**719-722.

5. Jordan CO, Slater M, Kottke TE: **Preventing chronic disease risk factors: rationale and feasibility.** *Medicina (Kaunas,Lithuania)* 2008, **44:**745-750.

6. Joshi R, Chow CK, Raju PK, Raju KR, Gottumukkala AK, Reddy KS, et al: **The Rural Andhra Pradesh Cardiovascular Prevention Study (RAPCAPS): a cluster randomized trial.** *Journal of the American College of Cardiology* 2012, **59:**1188-1196.

7. Kelishadi R, Hashemipour M: **Can a trial of motivational lifestyle counseling be effective for controlling childhood obesity and the associated cardiometabolic risk factors?** *Circulation* 2010, **122 (2):**e189-e189.

8. Kelishadi R, Sarrafzadegan N, Sadri GH, Pashmi R, Mohammadifard N, Tavasoli AA, et al: **Short-term results of a community-based program on promoting healthy lifestyle for prevention and control of chronic diseases in a developing country setting: Isfahan Healthy Heart Program.** *Asia-Pacific Journal of Public Health* 2011, **23:**518-533.

9. Kelishadi R, Malekahmadi M, Hashemipour M, Soghrati M, Soghrati M, Mirmoghtadaee P, et al: **Can a trial of motivational lifestyle counseling be effective for controlling childhood obesity and the associated cardiometabolic risk factors?** *Pediatrics & Neonatology* 2012, **53:**90-97.

10. Kozlov ID, Fomina RF, Apanasevich VV, Filatova VN, Avramenko TV: **[The effect of a 5-year program of IHD prevention on the risk profile and mortality].** *Terapevticheskii Arkhiv* 1997, **69:**14-17.

11. Lafay V, Diarra M, Coulibaly S, Coulibaly S, Desplats D: **Implementation of the hypertension network in Mali (RHYTM).** *Medecine Tropicale* 2006, **66:**437-442.

12. Molazem Z, Rezaei S, Mohebbi Z, Ostovan MA, Keshavarzi S: **Effect of continuous care model on lifestyle of patients with myocardial infarction.** *ARYA Atherosclerosis* 2013, **9:**186-191.

13. Moreira RP, Guedes NG, Cavalcante TF, Da Silva VM, De Araujo TL: **Oficinas educativas sobre hipertensão arterial: um estudo quasi-experimental sobre avaliação da eficácia.** *Online Brazilian Journal of Nursing* 2005, **4:**9-9.

14. Naser A, Shahamfar J, Kumar GV, Daga MK, Hadi HS, Saeed D, et al: **Cardiac risk factor changes through an intensive multifactorial life style modification program in CHD patients: Results from a two year follow up.** *Journal of Biological Sciences* 2008, **8:**248-257.

15. Pahkala K, Hietalampi H, Laitinen TT, Viikari JSA, Ronnemaa T, Niinikoski H, et al: **Ideal cardiovascular health in adolescence effect of lifestyle intervention and association with vascular intima-media thickness and elasticity (the Special Turku Coronary Risk Factor Intervention Project for Children [STRIP] Study).** *Circulation* 2013, **127:**2088-2096.

16. Prabhakaran D, Jeemon P, Goenka S, Lakshmy R, Thankappan KR, Ahmed F, et al: **Impact of a worksite intervention program on cardiovascular risk factors: a demonstration project in an Indian industrial population.** *Journal of the American College of Cardiology* 2009, **53:**1718-1728.

17. Rabiei K, Kelishadi R, Sarrafzadegan N, Sadri G, Amani A: **Short-term results of community-based interventions for improving physical activity: Isfahan Healthy Heart Programme.** *Archives of Medical Science* 2010, **6:**32-39.

18. Sarrafzadegan N, Kelishadi R, Sadri G, Malekafzali H, Pourmoghaddas M, Heidari K, et al: **Outcomes of a comprehensive healthy lifestyle program on cardiometabolic risk factors in a developing country: the Isfahan Healthy Heart Program.** *Archives of Iranian Medicine* 2013, **16:**4-11.

19. Satpute DA, Patil PH, Kuchake VG, Ingle PV, Surana SJ, Dighore PN: **Assessment of impact of patient counselling, nutrition and exercise in patients with Type 2 Diabetes Mellitus.** *International Journal of PharmTech Research* 2009, **1:**1-21.

20. Seligman BG, Polanczyk CA, Santos AS, Foppa M, Junges M, Bonzanini L, et al: **Intensive practical lifestyle intervention improves endothelial function in metabolic syndrome independent of weight loss: a randomized controlled trial.** *Metabolism: Clinical & Experimental* 2011, **60:**1736-1740.

21. Shahamfar J, Aslanabadi N, Gupta VK, Daga MK, Zolfaghari R, Shahamfar M: **Reduction of risk factors following lifestyle modification programe in patients with coronary heart disease.** *Journal International Medical Sciences Academy* 2010, **23:**73-74.

22. Shehu RA, Onasanya SA, Onigbinde TA, Ogunsakin EA, Baba DA: **Lifestyle, fitness and health promotion initiative of the University of Ilorin, Nigeria: an educational media intervention.** *Ethiopian Journal of Environmental Studies and Management* 2013, **6:**273-279.

23. Singh RB, Dubnov G, Niaz MA, Ghosh S, Singh R, Rastogi SS, et al: **Effect of an Indo-Mediterranean diet on progression of coronary artery disease in high risk patients (Indo-Mediterranean Diet Heart Study): a randomised single-blind trial.** In *Lancet*, vol. 360. pp. 1455-1461; 2002:1455-1461.

24. Siqueira-Catania A, Cezaretto A, De Barros CR, Salvador EP, Dos Santos TC, Ferreira SR: **Cardiometabolic risk reduction through lifestyle intervention programs in the Brazilian public health system.** *Diabetology and Metabolic Syndrome* 2013, **5:**21-21.

25. Steinbach M, Constantineanu M, Harnagea P, Theodorini S, Georgescu M, Mitu S, et al: **The Bucharest multifactorial prevention trial of coronary heart disease. General methodology and risk factor correction after five year follow-up (1971-1977).** *Medecine Interne* 1982, **20:**117-136.

26. Steinbach M, Constantineanu M, Harnagea P, Theodorini S, Georgescu M, Mitu S, et al: **The Bucharest multifactorial prevention trial. The changes of morbidity and of general and specific mortality.** *Medecine Interne* 1982, **20:**197-208.

27. Steinbach M, Constantineanu M, Georgescu M, Harnagea P, Theodorini S, Galfi L, et al: **The Bucharest Multifactorial Prevention Trial of Coronary Heart Disease--ten year follow-up: 1971-1982.** *Medecine Interne* 1984, **22:**99-106.

28. Sun L, Gao Y, Liu H, Zhang W, Ding Y, Li B, et al: **An assessment of the relationship between excess fluoride intake from drinking water and essential hypertension in adults residing in fluoride endemic areas.** *Science of the Total Environment* 2013, **443:**864-869.

29. Suwanphan A, Jiamjarasrangsi W, Sangwatanaroj S, Auamkul N, Yamwong S, Hiransuthikul N: **Effectiveness of coronary heart disease risk factors reduction program for hypertensive patients in Thailand.** *Asian Biomedicine* 2009, **3:**193-199.

30. Torres M, Ferreira T, Carvalho D, Nogueira L, Valenca D, Rodrigues M, et al: **Beneficial effect of dietary counseling on long-term weight loss of hypertensive patients with excess body weight.** *Hypertension* 2011, **58 (5):**e164-e164.

31. Tsao LI, Su MC, Hsiao PJ, Gau YM, An C, Lin KC: **The longitudinal effects of a perimenopausal health education intervention on the mid-life women in Taiwan.** *Maturitas* 2007, **57:**296-305.

32. Tu MS: **The effect of health education on self-care behaviors and hypertension control in elderly hypertensive patients at a veterans home. [Korean].** *Chinese Journal of Public Health* 1999, **18:**54-65.

33. Wang SG, Park SM: **The effects of nutrition counseling on food intakes and bloodlipids in cardiac patients.** *Korean Journal of Community Nutrition* 2002, **7:**92-101.

# APPENDICIES

## Appendix 1: Medline search strategy

|  |
| --- |
| 1. exp Cardiovascular Diseases/  2. cardio\*.tw.  3. cardia\*.tw.  4. heart\*.tw.  5. coronary\*.tw.  6. angina\*.tw.  7. ventric\*.tw.  8. myocard\*.tw.  9. pericard\*.tw.  10. isch?em\*.tw.  11. emboli\*.tw.  12. arrhythmi\*.tw.  13. thrombo\*.tw.  14. atrial fibrillat\*.tw.  15. tachycardi\*.tw.  16. endocardi\*.tw.  17. (sick adj sinus).tw.  18. exp Stroke/  19. (stroke or stokes).tw.  20. cerebrovasc\*.tw.  21. cerebral vascular.tw.  22. apoplexy.tw.  23. (brain adj2 accident\*).tw.  24. ((brain\* or cerebral or lacunar) adj2 infarct\*).tw.  25. exp Hypertension/  26. hypertensi\*.tw.  27. peripheral arter\* disease\*.tw.  28. ((high or increased or elevated) adj2 blood pressure).tw.  29. exp Hyperlipidemias/  30. hyperlipid\*.tw.  31. hyperlip?emia\*.tw.  32. hypercholesterol\*.tw.  33. hypercholester?emia\*.tw.  34. hyperlipoprotein?emia\*.tw.  35. hypertriglycerid?emia\*.tw.  36. exp Arteriosclerosis/  37. exp Cholesterol/  38. cholesterol.tw.  39. Blood Pressure/  40. blood pressure.tw.  41. multiple risk factor\*.tw.  42. or/1-41  43. exp Health Promotion/  44. exp Health Education/  45. exp Health Behavior/  46. exp Counseling/  47. Primary Prevention/  48. (multifactor\* adj5 (interven\* or prevent\*)).tw.  49. ((lifestyle or life-style or behavio?r\*) adj3 (interven\* or educat\* or advice\* or alter\* or change\* or inform\*)).tw.  50. (primary adj3 prevent\*).tw.  51. (risk factor\* adj3 (reduc\* or manage\* or managing or interven\* or program\*)).tw.  52. (educat\* adj3 (program\* or patient\*)).tw.  53. ((health\* or wellness or weight or diet\* or smok\*) adj2 (promot\* or program\* or campaign\* or advic\* or educat\*)).tw.  54. (nonpharmacologic\* or non-pharmacologic\*).tw.  55. ((lifestyle or life style or life-style or behavio?r\* or risk factor\*) adj3 modif\*).tw.  56. or/43-55  57. 42 and 56  58. randomized controlled trial.pt.  59. controlled clinical trial.pt.  60. randomized.ab.  61. placebo.ab.  62. drug therapy.fs.  63. randomly.ab.  64. trial.ab.  65. groups.ab.  66. 58 or 59 or 60 or 61 or 62 or 63 or 64 or 65  67. exp animals/ not humans.sh.  68. 66 not 67  69. 57 and 68  70. Developing Countries.sh,kf.  71. ((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.  72. ((developing or less\* developed or under developed or underdeveloped or middle income or low\* income) adj (economy or economies)).ti,ab.  73. (low\* adj (gdp or gnp or gross domestic or gross national)).ti,ab.  74. (low adj3 middle adj3 countr\*).ti,ab.  75. (lmic or lmics or third world or lami countr\*).ti,ab.  76. transitional countr\*.ti,ab.  77. Cambodia/  78. (cambodia\* or Kampuchea).cp,in,jw,mp.  79. "Democratic People's Republic of Korea"/  80. (north korea\* or (democratic people\* republic adj2 korea)).cp,in,jw,mp.  81. Myanmar/  82. (myanmar or burma or burmese).cp,in,jw,mp.  83. Fiji/  84. fiji\*.cp,in,jw,mp.  85. Indonesia/  86. indonesia\*.cp,in,jw,mp.  87. Micronesia/  88. (Micronesia\* or Kiribati).cp,in,jw,mp.  89. Laos/  90. (laos or (lao adj1 democratic republic) or (lao adj2 people) or marshall island\*).cp,in,jw,mp.  91. Mongolia/  92. mongolia\*.cp,in,jw,mp.  93. Papua New Guinea/  94. Papua New Guinea.cp,in,jw,mp.  95. Philippines/  96. (Philippines or filipino\*).cp,in,jw,mp.  97. samoa/ or "independent state of samoa"/  98. samoa\*.cp,in,jw,mp.  99. Melanesia/  100. (Solomon Islands or Timor-Leste or Melanesia\*).cp,in,jw,mp.  101. Tonga/  102. tonga\*.cp,in,jw,mp.  103. Vanuatu/  104. Vanuatu.cp,in,jw,mp.  105. Vietnam/  106. Vietnam\*.cp,in,jw,mp.  107. exp China/  108. (china or chinese).cp,in,jw,mp.  109. Malaysia/  110. Malaysia\*.cp,in,jw,mp.  111. Palau/  112. (Palau or Belau or Pelew).cp,in,jw,mp.  113. Thailand/  114. (Thailand or thai\*).cp,in,jw,mp.  115. (tuvalu or ellice islands).cp,in,jw,mp.  116. Kyrgyzstan/  117. (kyrgyzstan or kyrgyz or kirghizia or kirghiz).cp,in,jw,mp.  118. Tajikistan/  119. (tajikistan or tadzhik or tadzhikistan or tajikistan).cp,in,jw,mp.  120. Albania/  121. Albania\*.cp,in,jw,mp.  122. Armenia/  123. Armenia\*.cp,in,jw,mp.  124. "Georgia (Republic)"/  125. georgia\*.cp,in,jw,mp.  126. Yugoslavia/  127. (Jugoslavija\* or Yugoslavia\* or serbo-croat\* or macedonia\* or sloven\* or kosovo).cp,in,jw,mp.  128. Moldova/  129. Moldova\*.cp,in,jw,mp.  130. Ukraine/  131. Ukrain\*.cp,in,jw,mp.  132. Uzbekistan/  133. Uzbekistan.cp,in,jw,mp.  134. Azerbaijan/  135. Azerbaijan\*.cp,in,jw,mp.  136. "Republic of Belarus"/  137. (belarus or byelarus or belorussia).cp,in,jw,mp.  138. Bosnia-Herzegovina/  139. bosnia\*.cp,in,jw,mp.  140. Bulgaria/  141. Bulgaria\*.cp,in,jw,mp.  142. Kazakhstan/  143. (Kazakhstan or kazakh).cp,in,jw,mp.  144. Latvia/  145. Latvia\*.cp,in,jw,mp.  146. Lithuania/  147. Lithuania\*.cp,in,jw,mp.  148. "Macedonia (Republic)"/  149. Macedonia\*.cp,in,jw,mp.  150. Montenegro/  151. Montenegro.cp,in,jw,mp.  152. Romania/  153. Romania\*.cp,in,jw,mp.  154. exp Russia/  155. USSR/  156. (russia\* or ussr or soviet or cccp).cp,in,jw,mp.  157. Serbia/  158. serbia\*.cp,in,jw,mp.  159. Turkey/  160. turk\*.cp,in,jw,mp. not animal/  161. Turkmenistan/  162. Haiti/  163. Haiti.cp,in,jw,mp.  164. Belize/  165. Belize.cp,in,jw,mp.  166. Bolivia/  167. Bolivia\*.cp,in,jw,mp.  168. El Salvador/  169. El Salvador.cp,in,jw,mp.  170. Guatemala/  171. Guatemala\*.cp,in,jw,mp.  172. Guyana/  173. Guyana\*.cp,in,jw,mp.  174. Honduras/  175. Hondura\*.cp,in,jw,mp.  176. Nicaragua/  177. Nicaragua.cp,in,jw,mp.  178. Paraguay/  179. Paraguay.cp,in,jw,mp.  180. "Antigua and Barbuda"/  181. (Antigua or Barbuda).cp,in,jw,mp.  182. Argentina/  183. Argentin\*.cp,in,jw,mp.  184. Brazil/  185. Brazil\*.cp,in,jw,mp.  186. Chile/  187. Chile\*.cp,in,jw,mp.  188. Colombia/  189. Colombia\*.cp,in,jw,mp.  190. Costa Rica/  191. Costa Rica\*.cp,in,jw,mp.  192. Cuba/  193. Cuba\*.cp,in,jw,mp.  194. Dominica/  195. Dominican Republic/  196. Dominica\*.cp,in,jw,mp.  197. Ecuador/  198. Ecuador\*.cp,in,jw,mp.  199. Grenada/  200. Grenad\*.cp,in,jw,mp.  201. Jamaica/  202. Jamaica\*.cp,in,jw,mp.  203. Mexico/  204. Mexic\*.cp,in,jw,mp.  205. exp Panama/  206. Panama\*.cp,in,jw,mp.  207. Peru/  208. Peru\*.cp,in,jw,mp.  209. Saint Lucia/  210. (St Lucia\* or Saint Lucia\*).cp,in,jw,mp.  211. "Saint Vincent and the Grenadines"/  212. Grenadines.cp,in,jw,mp.  213. Suriname/  214. Surinam\*.cp,in,jw,mp.  215. Uruguay/  216. Uruguay.cp,in,jw,mp.  217. Venezuela/  218. Venezuela\*.cp,in,jw,mp.  219. Djibouti/  220. Djibouti.cp,in,jw,mp.  221. Egypt/  222. Egypt\*.cp,in,jw,mp.  223. Iraq/  224. Iraq\*.cp,in,jw,mp.  225. Morocco/  226. Morocc\*.cp,in,jw,mp.  227. Syria/  228. (Syria\* or gaza\*).cp,in,jw,mp.  229. Yemen/  230. yemen\*.cp,in,jw,mp.  231. Algeria/  232. Algeria\*.cp,in,jw,mp.  233. Iran/  234. Iran\*.cp,in,jw,mp.  235. Jordan/  236. jordan\*.cp,in,jw,mp.  237. Lebanon/  238. Leban\*.cp,in,jw,mp.  239. Libya/  240. Libya\*.cp,in,jw,mp.  241. Tunisia/  242. Tunisia\*.cp,in,jw,mp.  243. Afghanistan/  244. Afghan\*.cp,in,jw,mp.  245. Bangladesh/  246. Bangladesh\*.cp,in,jw,mp.  247. Nepal/  248. Nepal\*.cp,in,jw,mp.  249. Bhutan/  250. Bhutan\*.cp,in,jw,mp.  251. exp India/  252. india\*.cp,in,jw,mp.  253. Pakistan/  254. Pakistan\*.cp,in,jw,mp.  255. Sri Lanka/  256. Sri Lanka\*.cp,in,jw,mp.  257. Indian Ocean Islands/  258. Maldiv\*.cp,in,jw,mp.  259. Benin/  260. (Benin or Dahomey).cp,in,jw,mp.  261. Burkina Faso/  262. (Burkina Faso or Burkina Fasso or Upper Volta).cp,in,jw,mp.  263. Burundi/  264. Burundi\*.cp,in,jw,mp.  265. Central African Republic/  266. (Central African Republic or Ubangi-Shari or african\*).cp,in,jw,mp.  267. Chad/  268. Chad.cp,in,jw,mp.  269. Comoros/  270. (comoros or comores).cp,in,jw,mp.  271. "Democratic Republic of the Congo"/  272. (congo\* or zaire).cp,in,jw,mp.  273. Eritrea/  274. Eritrea\*.cp,in,jw,mp.  275. Ethiopia/  276. Ethiopia\*.cp,in,jw,mp.  277. Gambia/  278. Gambia\*.cp,in,jw,mp.  279. Guinea/  280. (Guinea\* not (New Guinea or Guinea Pig\* or Guinea Fowl)).cp,in,jw,mp.  281. Guinea-Bissau/  282. (Guinea-Bissau or Portuguese Guinea).cp,in,jw,mp.  283. Kenya/  284. Kenya\*.cp,in,jw,mp.  285. Liberia/  286. Liberia\*.cp,in,jw,mp.  287. Madagascar/  288. (Madagasca\* or Malagasy Republic).cp,in,jw,mp.  289. Malawi/  290. (Malawi\* or Nyasaland).cp,in,jw,mp.  291. Mali/  292. Mali\*.cp,in,jw,mp.  293. Mauritania/  294. Mauritania\*.cp,in,jw,mp.  295. Mozambique/  296. (Mozambi\* or Portuguese East Africa).cp,in,jw,mp.  297. Niger/  298. (Niger not (Aspergillus or Peptococcus or Schizothorax or Cruciferae or Gobius or Lasius or Agelastes or Melanosuchus or radish or Parastromateus or Orius or Apergillus or Parastromateus or Stomoxys)).cp,in,jw,mp.  299. Rwanda/  300. (Rwanda\* or Ruanda\*).cp,in,jw,mp.  301. Sierra Leone/  302. Sierra Leone\*.cp,in,jw,mp.  303. Somalia/  304. Somali\*.cp,in,jw,mp.  305. Tanzania/  306. Tanzania\*.cp,in,jw,mp.  307. Togo/  308. Togo\*.cp,in,jw,mp.  309. Uganda/  310. Uganda\*.cp,in,jw,mp.  311. Zimbabwe/  312. (Zimbabwe\* or Rhodesia\*).cp,in,jw,mp.  313. Cameroon/  314. Cameroon\*.cp,in,jw,mp.  315. Cape Verde/  316. Cape Verde\*.cp,in,jw,mp.  317. Congo/  318. (congo\* not ((democratic republic adj3 congo) or congo red or crimean-congo)).cp,in,jw,mp.  319. Cote d'Ivoire/  320. (Cote d'Ivoire or Ivory Coast).cp,in,jw,mp.  321. Ghana/  322. (Ghan\* or Gold Coast).cp,in,jw,mp.  323. Lesotho/  324. (Lesotho or Basutoland).cp,in,jw,mp.  325. Nigeria/  326. Nigeria\*.cp,in,jw,mp.  327. Atlantic Islands/  328. (sao tome adj2 principe).cp,in,jw,mp.  329. Senegal/  330. Senegal\*.cp,in,jw,mp.  331. Sudan/  332. Sudan\*.cp,in,jw,mp.  333. Swaziland/  334. Swazi\*.cp,in,jw,mp.  335. Zambia/  336. (Zambia\* or Northern Rhodesia\*).cp,in,jw,mp.  337. Angola/  338. Angola\*.cp,in,jw,mp.  339. Botswana/  340. (Botswana\* or Bechuanaland or Kalahari).cp,in,jw,mp.  341. Gabon/  342. Gabon\*.cp,in,jw,mp.  343. Mauritius/  344. (Mauriti\* or Agalega Islands).cp,in,jw,mp.  345. Namibia/  346. Namibia\*.cp,in,jw,mp.  347. Seychelles/  348. Seychelles.cp,in,jw,mp.  349. South Africa/  350. South Africa\*.cp,in,jw,mp.  351. or/70-350  352. 69 and 351 |

## Appendix 2: PRISMA checklist

| **Section/topic** | **#** | **Checklist item** | **Reported on page #** |
| --- | --- | --- | --- |
| **TITLE** | | |  |
| Title | 1 | Identify the report as a systematic review, meta-analysis, or both. | 1 |
| **ABSTRACT** | | |  |
| Structured summary | 2 | Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number. | 2 |
| **INTRODUCTION** | | |  |
| Rationale | 3 | Describe the rationale for the review in the context of what is already known. | 3 |
| Objectives | 4 | Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS). | 3-4 |
| **METHODS** | | |  |
| Protocol and registration | 5 | Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number. | 4 |
| Eligibility criteria | 6 | Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale. | 4 |
| Information sources | 7 | Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched. | 5 |
| Search | 8 | Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated. | 5 |
| Study selection | 9 | State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis). | 5 |
| Data collection process | 10 | Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators. | 5 |
| Data items | 11 | List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made. | 5 |
| Risk of bias in individual studies | 12 | Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis. | 6 |
| Summary measures | 13 | State the principal summary measures (e.g., risk ratio, difference in means). | 6 |
| Synthesis of results | 14 | Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I2) for each meta-analysis. | 7 |
| Risk of bias across studies | 15 | Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies). | 6 |
| Additional analyses | 16 | Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified. | 7 |
| **RESULTS** | | |  |
| Study selection | 17 | Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram. | 7 |
| Study characteristics | 18 | For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations. | 7-8 |
| Risk of bias within studies | 19 | Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12). | 8 |
| Results of individual studies | 20 | For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot. | 9 |
| Synthesis of results | 21 | Present results of each meta-analysis done, including confidence intervals and measures of consistency. | 9-12 |
| Risk of bias across studies | 22 | Present results of any assessment of risk of bias across studies (see Item 15). | 8 |
| Additional analysis | 23 | Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]). | 9-12 |
| **DISCUSSION** | | |  |
| Summary of evidence | 24 | Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers). | 12-13 |
| Limitations | 25 | Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias). | 12-13 |
| Conclusions | 26 | Provide a general interpretation of the results in the context of other evidence, and implications for future research. | 14 |
| **FUNDING** | | |  |
| Funding | 27 | Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review. | 14 |