**Additional file 6: Quality assessment**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Mixed Methods studies** | | | | | | | | | | | | | | | | | | |
| **Author, year** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **Total/48** | **Percentage of total** |
| Kamenderi et al. 2020 (216) | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 0 | 0 | 1 | 35 | 72.9 |
| Mackenzie et al. 2009 (107) | 1 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 0 | 0 | 0 | 34 | 70.8 |
| Mutai et al. 2020 (213) | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 1 | 3 | 3 | 3 | 1 | 0 | 0 | 1 | 34 | 70.8 |
| Papas et al., 2010 (106) | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 1 | 2 | 42 | 87.5 |
| **Qualitative studies** | | | | | | | | | | | | | | | | | | |
| **Author, Year** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **Total/42** | **Percentage of total** |
| Bazzi et al. 2019 (214) | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 2 | NA | NA | 3 | 2 | 2 | 3 | 0 | 2 | 28 | 66.7 |
| Beckerleg 2004 (133) | 0 | 2 | 3 | 3 | 2 | 1 | 2 | 2 | NA | NA | 3 | 3 | 1 | 1 | 0 | 0 | 23 | 54.8 |
| Ezard et al. 2011 (132) | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | NA | NA | 3 | 3 | 3 | 3 | 1 | 0 | 33 | 78.6 |
| Guise et al. 2015 (117) | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | NA | NA | 3 | 3 | 3 | 3 | 0 | 2 | 37 | 88.1 |
| Guise et al. 2019 (215) | 3 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | NA | NA | 3 | 3 | 2 | 3 | 0 | 1 | 29 | 69.0 |
| Kibicho & Campbell 2019 (122) | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | NA | NA | 3 | 3 | 2 | 2 | 0 | 3 | 35 | 83.3 |
| Mburu et al. 2018 (124) | 1 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | NA | NA | 3 | 3 | 2 | 3 | 0 | 2 | 33 | 78.6 |
| Mburu et al. 2019 (127) | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | NA | NA | 3 | 3 | 3 | 3 | 0 | 3 | 35 | 83.3 |
| Mburu et al. 2020 (125) | 1 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | NA | NA | 3 | 3 | 3 | 3 | 0 | 2 | 34 | 81.0 |
| Mburu et al. 2019 (138) | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | NA | NA | 3 | NA | 3 | 3 | 0 | 3 | 35 | 83.3 |
| Mburu 2018 (128) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | NA | NA | 3 | NA | 3 | 3 | 0 | 3 | 36 | 85.7 |
| Mital et al. 2016 (129) | 1 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | NA | NA | 3 | 3 | 3 | 3 | 0 | 2 | 33 | 78.6 |
| Muturi 2014 (130) | 2 | 3 | 1 | 3 | 3 | 2 | 2 | 2 | NA | NA | 3 | 3 | 3 | 3 | 0 | 3 | 33 | 78.6 |
| Muturi 2015 (123) | 3 | 3 | 1 | 3 | 3 | 2 | 2 | 2 | NA | NA | 3 | 3 | 3 | 3 | 0 | 0 | 31 | 73.8 |
| Muturi et al. 2016 (114) | 3 | 3 | 1 | 3 | 3 | 2 | 2 | 2 | NA | NA | 3 | 3 | 3 | 3 | 0 | 2 | 33 | 78.6 |
| Ndimbii et al. 2015 (115) | 1 | 1 | 2 | 3 | 3 | 2 | 1 | 2 | NA | NA | 3 | 3 | 3 | 3 | 0 | 0 | 27 | 64.3 |
| Ndimbii et al. 2018 (137) | 1 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | NA | NA | 3 | 3 | 2 | 3 | 2 | 3 | 37 | 88.1 |
| Njue et al. 2009 (120) | 0 | 2 | 2 | 3 | 2 | 2 | 1 | 2 | NA | NA | 3 | 3 | 2 | 2 | 2 | 2 | 28 | 66.7 |
| Njue et al. 2011 (134) | 0 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | NA | NA | 3 | 3 | 2 | 2 | 2 | 0 | 30 | 71.4 |
| Othieno et al. 2012 (135) | 2 | 2 | 3 | 2 | 2 | 3 | 1 | 2 | NA | NA | 3 | 3 | 1 | 2 | 0 | 2 | 27 | 64.3 |
| Rhodes et al. 2015 (116) | 3 | 2 | 3 | 3 | 3 | 3 | 1 | 3 | NA | NA | 3 | 3 | 3 | 3 | 0 | 0 | 33 | 78.6 |
| Rhodes 2018 (113) | 2 | 2 | 3 | 3 | 3 | 2 | 1 | 2 | NA | NA | 3 | 3 | 3 | 3 | 0 | 0 | 30 | 71.4 |
| Ssewanyana et al. 2018 (131) | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | NA | NA | 3 | 3 | 3 | 3 | 0 | 3 | 38 | 90.5 |
| Syvertsen et al. 2016 (136) | 0 | 2 | 2 | 2 | 3 | 1 | 0 | 1 | NA | NA | 3 | 3 | 2 | 2 | 0 | 1 | 22 | 52.3 |
| Syvertsen et al. 2019 (118) | 0 | 2 | 1 | 1 | 3 | 1 | 1 | 1 | NA | NA | 3 | 3 | 3 | 3 | 0 | 1 | 23 | 54.8 |
| Velloza et al. 2015 (121) | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | NA | NA | 3 | 3 | 3 | 3 | 0 | 3 | 38 | 90.5 |
| Yotebieng et al. 2016 (119) | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | NA | NA | 3 | 3 | 3 | 3 | 0 | 2 | 35 | 83.3 |
| **Quantitative studies** | | | | | | | | | | | | | | | | | | |
| **First author, Year** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** | **16** | **Total/42** | **Percentage of total** |
| Aden et al. 2006 (21) | 0 | 3 | 3 | 0 | 1 | 2 | 0 | 3 | 0 | 0 | NA | 0 | 0 | NA | 0 | 0 | 12 | 28.6 |
| Akiyama et al. 2019 (91) | 1 | 3 | 2 | 3 | 3 | 2 | 1 | 2 | 1 | 3 | NA | 3 | 3 | NA | 0 | 3 | 30 | 71.4 |
| Anundo 2019 (205) | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | NA | 3 | 1 | NA | 0 | 0 | 30 | 71.4 |
| Asiki et al. 2018 (195) | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 3 | 3 | 3 | NA | 3 | 3 | NA | 2 | 2 | 38 | 90.5 |
| Astrom et al. 2004 (98) | 0 | 3 | 3 | 3 | 3 | 2 | 3 | 1 | 1 | 3 | NA | 2 | 0 | NA | 0 | 0 | 24 | 57.1 |
| Atwoli et al. 2011 (97) | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | NA | 3 | 2 | NA | 0 | 2 | 33 | 78.6 |
| Ayah et al. 2013 (84) | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | NA | 3 | 2 | NA | 0 | 3 | 34 | 81.0 |
| Ayaya et al. 2002 (95) | 1 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 1 | 3 | NA | 3 | 2 | NA | 0 | 2 | 30 | 71.4 |
| Balogun et al. 2014 (172) | 2 | 3 | 2 | 1 | 3 | 1 | 1 | 1 | 1 | 3 | NA | 3 | 3 | NA | 0 | 3 | 27 | 64.3 |
| Beckerlerg et al. 2006 (155) | 0 | 3 | 3 | 2 | 3 | 3 | 1 | 3 | 2 | 3 | NA | 3 | 1 | NA | 0 | 0 | 27 | 64.3 |
| Bengston et al. 2014 (40) | 1 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | NA | 3 | 2 | NA | 0 | 3 | 31 | 73.8 |
| Budambula et al. 2018 (196) | 1 | 3 | 1 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | NA | 3 | 3 | NA | 3 | 3 | 35 | 83.3 |
| Cagle et al. 2018 (197) | 1 | 3 | 3 | 0 | 2 | 2 | 2 | 2 | 2 | 3 | NA | 2 | 2 | NA | 0 | 2 | 26 | 61.9 |
| Chersich et al. 2014 (41) | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 3 | 36 | 85.7 |
| Christensen et al. 2009 (68) | 0 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 0 | 31 | 73.8 |
| Cleland et al. 2007 (156) | 0 | 3 | 3 | 0 | 0 | 3 | 3 | 3 | 0 | 3 | NA | 3 | 3 | NA | 0 | 3 | 27 | 64.2 |
| De Menil et al. 2014 (173) | 1 | 3 | 3 | 1 | 2 | 2 | 2 | 1 | 1 | 3 | NA | 2 | 1 | NA | 0 | 2 | 24 | 57.1 |
| Deveau Dhadphale 2010 (111) | 1 | 2 | 3 | 2 | 3 | 2 | 1 | 3 | 1 | 3 | NA | 3 | 1 | NA | 0 | 0 | 25 | 59.5 |
| Dhadphale et al. 1982 (10) | 0 | 2 | 1 | 1 | 2 | 1 | 0 | 1 | 0 | 3 | NA | 3 | 0 | NA | 0 | 0 | 14 | 33.3 |
| Dhadphale 1997 (29) | 0 | 3 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 3 | NA | 3 | 0 | NA | 0 | 0 | 18 | 42.9 |
| Embleton 2012 (52) | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 3 | 37 | 88.1 |
| Embleton et al. 2013(168) | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 3 | 36 | 85.7 |
| Embleton et al. 2017 (188) | 1 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 3 | 35 | 83.3 |
| Gathecha et al. 2018 (80) | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 3 | 35 | 83.3 |
| Gichuki et al. 2015 (112) | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | NA | 3 | 2 | NA | 1 | 2 | 37 | 88.1 |
| Gitatui et al. 2019 (22) | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | NA | 3 | 3 | NA | 3 | 2 | 39 | 92.9 |
| Giusto et al. 2020 (109) | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | NA | 3 | 3 | NA | 1 | 3 | 38 | 90.5 |
| Goldblatt et al. 2015 (177) | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | NA | 3 | 3 | NA | 1 | 3 | 37 | 88.1 |
| Goodman et al. 2017 (189) | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 3 | 37 | 88.1 |
| Hall et al. 1993 (150) | 1 | 2 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | NA | 3 | 3 | NA | 0 | 0 | 29 | 69.0 |
| Harder et al. 2019 (99) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 3 | 38 | 90.5 |
| Haregu et al. 2019 (206) | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 2 | 34 | 81.0 |
| Hulzebosch et al. 2015 (178) | 1 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 3 | 34 | 81.0 |
| Jenkins et al. 2017 (62) | 1 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 2 | 33 | 78.6 |
| Joshi et al. 2015 (86) | 1 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 3 | 34 | 81.0 |
| Kaai et al. 2019 (96) | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 1 | 3 | NA | 3 | 3 | NA | 0 | 2 | 28 | 66.7 |
| Kaduka et al. 2017 (83) | 0 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 3 | NA | 3 | 2 | NA | 0 | 0 | 27 | 64.3 |
| Kamau et al. 2017 (190) | 0 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | NA | 3 | 2 | NA | 0 | 2 | 30 | 71.4 |
| Kamenderi 2019 (207) | 1 | 3 | 2 | 3 | 3 | 1 | 1 | 2 | 1 | 3 | NA | 3 | 3 | NA | 0 | 0 | 26 | 61.9 |
| Kamenderi et al. 2019 (208) | 1 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 1 | 3 | NA | 3 | 2 | NA | 0 | 0 | 29 | 69.0 |
| Kamenderi et al. 2019 (58) | 1 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | NA | 3 | 2 | NA | 0 | 1 | 32 | 76.2 |
| Kamotho et al. 2004(154) | 1 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 | NA | 3 | 2 | NA | 0 | 2 | 26 | 61.9 |
| Kanyanya et al. 2007 (33) | 2 | 3 | 3 | 1 | 3 | 1 | 0 | 1 | 0 | 3 | NA | 3 | 0 | NA | 0 | 0 | 20 | 47.6 |
| Kaplan et al. 1990 (149) | 1 | 2 | 3 | 2 | 3 | 2 | 1 | 2 | 0 | 3 | NA | 3 | 0 | NA | 0 | 1 | 23 | 54.8 |
| Kendagor et al. 2018 (79) | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | NA | 3 | 3 | NA | 0 | 2 | 33 | 78.6 |
| Khasakhala et al. 2013 (54) | 1 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 2 | 34 | 81.0 |
| Khasakhala et al. 2013 (55) | 1 | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 2 | 33 | 78.6 |
| Kiburi et al. 2018 (48) | 1 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 3 | NA | 3 | 3 | NA | 0 | 2 | 31 | 73.8 |
| Kimando et al. 2017 (69) | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | NA | 3 | 3 | NA | 0 | 0 | 26 | 61.9 |
| Kimani et al. 2019 (65) | 1 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 0 | 3 | NA | 3 | 3 | NA | 0 | 2 | 28 | 66.7 |
| Kimbui et al. 2018(38) | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 2 | 36 | 85.7 |
| Kinoti et al. 2011 (61) | 1 | 3 | 3 | 1 | 2 | 2 | 2 | 2 | 1 | 3 | NA | 3 | 0 | NA | 0 | 2 | 25 | 59.5 |
| Kinyanjui & Atwoli 2013 (169) | 0 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 2 | NA | 0 | 2 | 32 | 76.2 |
| Kisilu et al. 2019 (31) | 1 | 3 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | NA | 3 | 1 | NA | 0 | 0 | 19 | 45.2 |
| Komu et al. 2009(159) | 0 | 3 | 2 | 2 | 2 | 1 | 1 | 1 | 0 | 3 | NA | 3 | 1 | NA | 0 | 2 | 21 | 50.0 |
| Korhonen et al. 2018 (198) | 1 | 2 | 3 | 1 | 3 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 3 | 33 | 78.6 |
| Kunzweiler et al. 2017 (191) | 0 | 3 | 3 | 2 | 0 | 3 | 0 | 3 | 0 | 3 | NA | 3 | 3 | NA | 0 | 3 | 26 | 61.9 |
| Kunzweiler et al. 2018 (199) | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 3 | 37 | 88.1 |
| Kuria et al. 2012 (49) | 1 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 1 | 3 | NA | 3 | 2 | NA | 0 | 2 | 31 | 73.8 |
| Kurth et al. 2015 (179) | 1 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 1 | 3 | NA | 3 | 3 | NA | 0 | 2 | 33 | 78.6 |
| Kurui & Ogoncho  2019 (140) | 1 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 0 | 3 | NA | 3 | 1 | NA | 0 | 0 | 24 | 57.1 |
| Kurui & Ogoncho2020 (94) | 1 | 3 | 2 | 2 | 3 | 1 | 1 | 1 | 1 | 3 | NA | 3 | 1 | NA | 0 | 0 | 22 | 52.4 |
| Kwamanga et al. 2001 (152) | 0 | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 0 | 3 | NA | 3 | 1 | NA | 3 | 0 | 27 | 64.3 |
| Kwamanga et al. 2003 (153) | 1 | 3 | 3 | 2 | 3 | 2 | 1 | 2 | 0 | 2 | NA | 3 | 1 | NA | 0 | 0 | 23 | 54.8 |
| Kwobah et al. 2017 (192) | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 2 | NA | 0 | 2 | 33 | 78.6 |
| L’Engle et al. 2014 (100) | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 0 | 33 | 78.6 |
| Lo et al. 2013 (37) | 1 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 1 | 3 | NA | 3 | 2 | NA | 0 | 3 | 32 | 76.2 |
| Luchters et al. 2011 (165) | 1 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 3 | NA | 3 | 3 | NA | 0 | 2 | 33 | 78.6 |
| Lukandu et al. 2015 (36) | 1 | 3 | 1 | 1 | 3 | 3 | 1 | 3 | 0 | 3 | NA | 3 | 1 | NA | 0 | 0 | 23 | 54.8 |
| Macigo et al. 2006 (34) | 1 | 3 | 1 | 1 | 2 | 2 | 0 | 2 | 0 | 3 | NA | 3 | 1 | NA | 0 | 1 | 20 | 47.6 |
| Magati et al. 2018 (200) | 0 | 3 | 2 | 3 | 3 | 1 | 1 | 1 | 0 | 3 | NA | 3 | 3 | NA | 0 | 0 | 23 | 54.8 |
| Maina et al. 2015 (50) | 1 | 3 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 3 | NA | 3 | 2 | NA | 0 | 2 | 31 | 73.8 |
| Mannik et al. 2018 (201) | 0 | 2 | 3 | 2 | 3 | 2 | 1 | 2 | 2 | 3 | NA | 3 | 2 | NA | 0 | 3 | 28 | 66.7 |
| Maru et al. 2003 (32) | 0 | 3 | 3 | 2 | 3 | 1 | 0 | 1 | 0 | 3 | NA | 3 | 0 | NA | 0 | 0 | 19 | 45.2 |
| Mburu et al. 2018 (70) | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 3 | NA | 3 | 3 | NA | 0 | 2 | 25 | 59.5 |
| Medley et al. 2014 (174) | 1 | 2 | 1 | 2 | 3 | 3 | 2 | 2 | 1 | 3 | NA | 3 | 3 | NA | 0 | 2 | 28 | 66.7 |
| Menach et al. 2012 (75) | 1 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | NA | 3 | 1 | NA | 0 | 1 | 27 | 64.3 |
| Menya et al. 2019 (77) | 1 | 2 | 3 | 2 | 3 | 3 | 1 | 3 | 0 | 3 | NA | 3 | 3 | NA | 0 | 3 | 30 | 71.4 |
| Micheni et al. 2015 (23) | 0 | 2 | 1 | 1 | 3 | 1 | 0 | 1 | 0 | 3 | NA | 3 | 3 | NA | 0 | 2 | 20 | 47.6 |
| Mkuu et al. 2018 (202) | 1 | 3 | 2 | 3 | 3 | 2 | 2 | 2 | 1 | 3 | NA | 3 | 3 | NA | 0 | 2 | 30 | 71.4 |
| Mohammed et al. 2018 (71) | 0 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | NA | 3 | 3 | NA | 0 | 3 | 32 | 76.2 |
| Mokaya et al. 2016 (186) | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 2 | NA | 3 | 3 | NA | 0 | 0 | 31 | 73.8 |
| Moscoe et al. 2019 (104) | 1 | 2 | 2 | 3 | 2 | 2 | 1 | 2 | 1 | 3 | NA | 3 | 3 | NA | 0 | 3 | 28 | 66.7 |
| Mundane et al. 2013 (85) | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 1 | 3 | NA | 3 | 3 | NA | 0 | 3 | 29 | 69.0 |
| Mungai & Midigo 2019 (67) | 1 | 3 | 3 | 2 | 3 | 1 | 1 | 1 | 0 | 3 | NA | 3 | 0 | NA | 0 | 0 | 21 | 50.0 |
| Muraguri et al. 2015 (44) | 0 | 3 | 2 | 2 | 3 | 2 | 0 | 1 | 0 | 3 | NA | 3 | 0 | NA | 0 | 2 | 21 | 50.0 |
| Muriungi & Ndetei 2013(105) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | NA | 3 | 3 | NA | 0 | 2 | 36 | 85.7 |
| Muthumbi et al. 2017 (82) | 1 | 2 | 2 | 2 | 3 | 2 | 0 | 2 | 0 | 3 | NA | 3 | 3 | NA | 0 | 3 | 26 | 61.9 |
| Mutiso et al. 2019 (209) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 3 | 38 | 90.5 |
| Muture et al. 2011 (72) | 1 | 3 | 2 | 2 | 3 | 2 | 1 | 2 | 0 | 3 | NA | 3 | 3 | NA | 0 | 1 | 26 | 61.9 |
| Mwangi et al. 2019(89) | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | NA | 3 | 3 | NA | 0 | 3 | 36 | 85.7 |
| Nall et al. 2019 (210) | 2 | 3 | 1 | 3 | 3 | 2 | 2 | 2 | 1 | 3 | NA | 3 | 3 | NA | 0 | 3 | 31 | 73.8 |
| Ndegwa & Waiyaki 2020 (46) | 2 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 1 | 3 | NA | 3 | 1 | NA | 0 | 0 | 28 | 66.7 |
| Ndetei et al. 2008 (30) | 0 | 3 | 3 | 0 | 3 | 1 | 1 | 1 | 0 | 3 | NA | 3 | 0 | NA | 0 | 0 | 18 | 42.9 |
| Ndetei et al. 2008 (158) | 1 | 1 | 3 | 1 | 2 | 1 | 2 | 1 | 1 | 3 | NA | 3 | 3 | NA | 0 | 0 | 22 | 52.4 |
| Ndetei et al. 2009 (160) | 0 | 3 | 3 | 2 | 3 | 2 | 1 | 2 | 1 | 3 | NA | 3 | 1 | NA | 0 | 0 | 24 | 57.1 |
| Ndetei et al. 2009 (161) | 0 | 3 | 3 | 2 | 3 | 2 | 1 | 2 | 0 | 3 | NA | 3 | 2 | NA | 0 | 0 | 24 | 57.1 |
| Ndetei et al. 2010 (24) | 1 | 2 | 1 | 2 | 2 | 1 | 2 | 1 | 1 | 3 | NA | 3 | 1 | NA | 0 | 0 | 20 | 47.6 |
| Ndetei et al. 2012 (167) | 0 | 3 | 3 | 0 | 0 | 3 | 3 | 3 | 0 | 3 | NA | 3 | 3 | NA | 0 | 3 | 27 | 64.2 |
| Ndugwa et al. 2011 (166) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | NA | 3 | 3 | NA | 0 | 3 | 37 | 88.1 |
| Ng’ang’a et al. 2018 (203) | 1 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 3 | NA | 3 | 3 | NA | 0 | 2 | 33 | 78.6 |
| Ngaruyia et al. 2018 (64) | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 2 | 35 | 83.3 |
| Nguchu et al. 2009 (162) | 0 | 3 | 3 | 2 | 2 | 3 | 2 | 3 | 2 | 3 | NA | 3 | 1 | NA | 0 | 1 | 28 | 66.7 |
| Ngure et al 2019 (47) | 1 | 3 | 2 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | NA | 3 | 1 | NA | 0 | 0 | 27 | 64.3 |
| Nielsen et al. 1989 (148) | 0 | 3 | 1 | 1 | 2 | 2 | 3 | 2 | 3 | 3 | NA | 3 | 1 | NA | 0 | 0 | 24 | 57.1 |
| Njoroge et al. 2017 (170) | 0 | 2 | 2 | 2 | 3 | 2 | 1 | 2 | 0 | 3 | NA | 3 | 3 | NA | 0 | 0 | 23 | 54.8 |
| Njuguna et al. 2013 (27) | 0 | 1 | 3 | 1 | 2 | 1 | 0 | 1 | 0 | 3 | NA | 3 | 0 | NA | 0 | 1 | 16 | 38.1 |
| Ogwell et al. 2003 (53) | 0 | 3 | 3 | 3 | 3 | 3 | 1 | 3 | 0 | 3 | NA | 3 | 3 | NA | 0 | 2 | 30 | 71.4 |
| Okal et al. 2013 (35) | 0 | 1 | 2 | 3 | 3 | 3 | 1 | 3 | 0 | 3 | NA | 3 | 1 | NA | 0 | 3 | 26 | 61.9 |
| Olack et al. 2015 (180) | 1 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 1 | 3 | NA | 3 | 2 | NA | 0 | 3 | 30 | 71.4 |
| Ominde et al. 2019 (25) | 0 | 3 | 2 | 2 | 2 | 2 | 1 | 1 | 0 | 3 | NA | 3 | 1 | NA | 0 | 0 | 20 | 47.6 |
| Omolo & Dhadphale 1987 (26) | 0 | 3 | 3 | 2 | 2 | 2 | 0 | 2 | 0 | 3 | NA | 3 | 0 | NA | 0 | 0 | 20 | 47.6 |
| Ongeri et al. 2019 (87) | 1 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 2 | 35 | 83.3 |
| Onsomu et al. 2015(181) | 1 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | NA | 3 | 3 | NA | 0 | 2 | 31 | 73.8 |
| Othieno et al. 2000 (59) | 0 | 3 | 2 | 2 | 3 | 2 | 1 | 2 | 1 | 3 | NA | 3 | 1 | NA | 0 | 0 | 23 | 54.8 |
| Othieno et al. 2014(175) | 1 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 3 | NA | 3 | 3 | NA | 0 | 2 | 29 | 69.0 |
| Othieno et al. 2015a(182) | 1 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 3 | NA | 3 | 3 | NA | 0 | 2 | 29 | 69.0 |
| Othieno et al. 2015b (81) | 1 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | NA | 3 | 3 | NA | 0 | 2 | 31 | 73.8 |
| Owuor et al. 2019 (211) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | NA | 3 | 2 | NA | 1 | 1 | 36 | 85.7 |
| Oyaro et al. 2018 (90) | 0 | 3 | 3 | 2 | 3 | 3 | 1 | 2 | 1 | 3 | NA | 3 | 1 | NA | 0 | 0 | 25 | 59.5 |
| Pack et al. 2014 (42) | 1 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | NA | 3 | 2 | NA | 0 | 3 | 32 | 76.2 |
| Papas et al. 2011 (101) | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 1 | 2 | 36 | 85.7 |
| Papas et al. 2016(92) | 1 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 2 | 33 | 78.6 |
| Papas et al. 2017 (74) | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | NA | 3 | 3 | NA | 3 | 3 | 40 | 95.2 |
| Parcesepe et al. 2016 (102) | 1 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 2 | 34 | 81.0 |
| Patel et al. 2013 (76) | 1 | 3 | 2 | 2 | 3 | 1 | 1 | 1 | 0 | 3 | NA | 3 | 1 | NA | 0 | 0 | 21 | 50.0 |
| Peltzer et al. 2009 (163) | 1 | 3 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 3 | NA | 3 | 3 | NA | 0 | 3 | 33 | 78.6 |
| Peltzer et al. 2011 (57) | 1 | 3 | 1 | 2 | 3 | 3 | 1 | 2 | 1 | 3 | NA | 3 | 3 | NA | 0 | 2 | 28 | 66.7 |
| Pengpid & Peltzer 2019 (66) | 0 | 3 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 3 | NA | 3 | 3 | NA | 0 | 2 | 31 | 73.8 |
| Perl et al. 2015 (108) | 1 | 2 | 1 | 2 | 3 | 2 | 1 | 2 | 0 | 3 | NA | 3 | 3 | NA | 0 | 3 | 26 | 61.9 |
| Ploubidis 2013 (171) | 3 | 3 | 3 | 2 | 3 | 2 | 1 | 2 | 0 | 3 | NA | 3 | 3 | NA | 0 | 3 | 31 | 73.8 |
| Roth et al. 2017 (193) | 1 | 2 | 3 | 2 | 3 | 2 | 1 | 2 | 0 | 3 | NA | 3 | 2 | NA | 0 | 2 | 26 | 61.9 |
| Rudatsikira et al. 2007 (51) | 0 | 2 | 2 | 2 | 3 | 2 | 1 | 2 | 0 | 3 | NA | 3 | 3 | NA | 0 | 2 | 25 | 59.5 |
| Sanders et al. 2007 (157) | 0 | 2 | 2 | 3 | 3 | 2 | 1 | 2 | 0 | 3 | NA | 3 | 3 | NA | 0 | 3 | 27 | 64.3 |
| Saunders et al. 1993 (151) | 1 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | NA | 3 | 3 | NA | 0 | 0 | 30 | 71.4 |
| Secor et al. 2015 (183) | 2 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | NA | 3 | 2 | NA | 0 | 2 | 31 | 73.8 |
| Syvertsen et al. 2015 (184) | 0 | 3 | 3 | 0 | 0 | 3 | 0 | 2 | 0 | 3 | NA | 3 | 3 | NA | 0 | 3 | 23 | 54.8 |
| Shaffer et al. 2004 (60) | 0 | 2 | 3 | 2 | 3 | 2 | 2 | 2 | 1 | 3 | NA | 3 | 1 | NA | 0 | 1 | 25 | 59.5 |
| Takahashi et al. 2017 (194) | 0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | NA | 3 | 3 | NA | 0 | 3 | 36 | 85.7 |
| Takahashi et al. 2018 (110) | 2 | 3 | 3 | 3 | 2 | 3 | 2 | 3 | 1 | 3 | NA | 3 | 3 | NA | 0 | 2 | 33 | 78.6 |
| Tang et al. 2018 (204) | 1 | 3 | 2 | 1 | 3 | 2 | 1 | 2 | 3 | 0 | NA | 3 | 2 | NA | 0 | 3 | 26 | 61.9 |
| Tegang et al. 2010 (164) | 0 | 3 | 3 | 2 | 3 | 3 | 2 | 2 | 3 | 2 | NA | 3 | 3 | NA | 0 | 1 | 30 | 71.4 |
| Thuo et al. 2008 (28) | 0 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 3 | 0 | NA | 3 | 0 | NA | 0 | 0 | 17 | 40.5 |
| Tsuei et al. 2017 (93) | 0 | 3 | 2 | 2 | 2 | 2 | 1 | 2 | 3 | 0 | NA | 3 | 3 | NA | 0 | 2 | 25 | 59.5 |
| Tun et al. 2015 (185) | 1 | 2 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 1 | NA | 3 | 2 | NA | 0 | 3 | 30 | 71.4 |
| Wekesah et al. 2018 (39) | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 1 | NA | 3 | 3 | NA | 0 | 2 | 28 | 66.7 |
| Were et al. 2014 (176) | 1 | 3 | 2 | 2 | 3 | 2 | 1 | 2 | 3 | 1 | NA | 3 | 1 | NA | 0 | 1 | 25 | 59.5 |
| White et al. 2016 (187) | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 1 | NA | 3 | 2 | NA | 0 | 3 | 28 | 66.7 |
| Widmann et al. 2014 (88) | 1 | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | NA | 3 | 3 | NA | 2 | 3 | 38 | 90.5 |
| Widmann et al. 2017 (103) | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | NA | 3 | 3 | NA | 2 | 3 | 38 | 90.5 |
| Wilson et al. 2016 (43) | 1 | 2 | 1 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | NA | 3 | 3 | NA | 3 | 3 | 36 | 85.7 |
| Winston et al. 2015 (56) | 1 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 3 | 2 | NA | 3 | 3 | NA | 0 | 3 | 32 | 76.2 |
| Winter et al. 2020 (73) | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 1 | NA | 3 | 3 | NA | 1 | 3 | 34 | 81.0 |
| Woldu et al. 2019 (212) | 1 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | NA | 3 | 3 | NA | 3 | 3 | 38 | 90.5 |