|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Study | Year Pub. | Study Period | Country | Study Type | Inclusion | Age group | Median age | n |
| Ruppe 2009 | 2009 | NR | Senegal | Cross sec. | Children in village selected for remoteness | Children | 6.9yr\* | 20 |
| Tande 2009 | 2009 | 2003 | Mali | Cross sec. | Orphanage children | Children | NR | 38 |
|  |  |  |  |  | Orphanage staff | Adults | NR | 30 |
| Andriatahina 2010 | 2010 | 2008 | Madagascar | Cohort | Inpatients | Children | 38.3m | 244 |
| Herindrainy 2011 | 2011 | 2009 | Madagascar | Cross sec. | Health centre attendees | Adults | NR | 306 |
|  |  |  |  |  | Health centre attendees | Children | NR | 147 |
| Woerther 2011 | 2011 | 2007-08 | Niger | Cohort | Children with SAM, inpatients | Children | 16.3m\* | 55 |
| Albrechtova 2012 | 2012 | 2009 | Kenya | Cross sec. | Community members | Adults | NR | 23 |
| Isendahl 2012 | 2012 | 2010 | Guinea-Bissau | Cross sec. | Children att. hospital w/ fever or tachycardia | Children | NR | 408 |
| Lonchel 2012 | 2012 | 2009 | Cameroon | Cross sec. | Students in the community | Adults | 24.7yr\* | 150 |
|  |  |  |  |  | Outpatients | Adults | 36.9yr\* | 208 |
| Lonchel 2013 | 2013 | 2009 | Cameroon | Cross sec. | Inpatients | Adults | 46.8yr\* | 121 |
| Magoue 2013 | 2013 | 2010 | Cameroon | Cross sec. | Hospital workers and their families | Adults | NR | 87 |
|  |  |  |  |  | Inpatients | Adults | NR | 208 |
|  |  |  |  |  | Relatives and carers of inpatients | Adults | NR | 63 |
|  |  |  |  |  | Outpatients | Adults | NR | 232 |
| Schaumburg 2013 | 2013 | 2010-11 | Gabon | Cross sec. | Hospital inpatients | Children | NR | 200 |
| Nelson 2014 | 2014 | 2013 | Tanzania | Cohort | Pregnant women and neonates, inpatient | Neonate | 0d | 126 |
|  |  |  |  |  |  | Adults | 26.5yr\* | 113 |
| Chereau 2015 | 2015 | 2013-14 | Madagascar | Cross sec. | Pregnant women in the community | Adults | 26yr\* | 356 |
| Desta 2016 | 2016 | 2012 | Ethiopia | Cross sec. | Inpatients | Adults | 35yr | 154 |
|  |  |  |  |  | Inpatients | Children | 7yr | 94 |
|  |  |  |  |  | Inpatients | Neonate | 9d | 19 |
| Djuikoue 2016 | 2016 | 2011-12 | Cameroon | Cross sec. | Outpatient women with susp. UTI | Adults | NR | 86 |
| Farra 2016 | 2016 | 2013 | CAR | Cross sec. | Healthy community controls from diarrhoea study | Children | 10.5m | 134 |
| Kurz 2016 | 2016 | 2014 | Rwanda | Cohort | Inpatients and one main caregiver | both | 29yr | 753 |
| Mshana 2016 | 2016 | 2014 | Tanzania | Cross sec. | Community members | both | 10yr | 334 |
| Ribeiro 2016 | 2016 | 2013 | Angola | Cross sec. | Community members no antibiotics/hospital exposure last 3 m | Adults | NR | 18 |
| Tellevik 2016 | 2016 | 2010-11 | Tanzania | Cross sec. | <2yr attending health centre for vaccine | Children | NR | 250 |
|  |  |  |  |  | Inpatients | Children | NR | 353 |
| Magwenzi 2017 | 2017 | 2015 | Zimbabwe | Cohort | Inpatient within 24hr of admission | Children | 1.0yr | 164 |
| Moremi 2017 | 2017 | 2015 | Tanzania | Cross sec. | Street children | Children | 14.2yr\* | 107 |
| Wilmore 2017 | 2017 | 2014-15 | Zimbabwe | Cross sec. | Outpatient, HIV infected, stable on ART | Children | 11yr | 175 |
| Chirindze 2018 | 2018 | 2016 | Mozambique | Cross sec. | Students in the community | Adults | NR | 275 |
| Founou 2018 | 2018 | 2017 | South Africa | Cohort | On hospital admission | Adults | NR | 43 |
| Herindrainy 2018 | 2018 | 2015-16 | Madagascar | Cross sec. | Pregnant women at delivery (home/facility) | Adults | 26yr\* | 275 |
| Katakweba 2018 | 2018 | 2011-13 | Tanzania | Cross sec. | Community members | Adults | NR | 70 |
| Marando 2018 | 2018 | 2016 | Tanzania | Cross sec. | Neonates with sepsis | Neonate | 6d | 304 |
| Moremi 2018 | 2018 | 2014-15 | Tanzania | Cohort | On hospital admission | Adults | NR | 930 |
| Nikema Pessinaba 2018 | 2018 | 2015-16 | Togo | Cross sec. | <5yr with febrile gastroenteritis | Children | NR | 81 |
| Sanneh 2018 | 2018 | 2015 | The Gambia | Cross sec. | Food handlers in schools | Adults | 37yr\* | 565 |
| Stanley 2018 | 2018 | 2017 | Uganda | Cross sec. | Participants who reared animals, attending health facility with a fever and/or diarrhoea but without malaria | both | 21.7yr\* | 300 |

Table 1: Details of included studies. CAR = Central African Republic; ART = antiretroviral therapy; UTI = urinary tract infection; NR = not reported. yr = year; m = months, d = days, hr = hours. \* = mean rather than media.