# Table S1. The Joanna Briggs Institute score for quality of evidence for prevalence studies

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Topic  Authors (year) | Was the  Sample frame  appropriate  to address  the target  population? | Were study  participants  sampled appropriately? | Was the  sample  size  adequate? | Were the  study  subjects  and the  setting  described  in detail? | Was the data  analysis  conducted  with sufficient  coverage of  the identified  sample? | Were valid  methods  used for the  identification  of the  condition? | Was the  condition  measured in  a standardized,  reliable way  for all  participants? | Was there  An appropriate  statistical  analysis? | Was the  response rate  adequate, and  if not, was the  low response  rate managed  appropriately? | Overall  appraisal:  Include  Exclude seek  further info  Total met  criteria |
| Zewdu, L. B.  (2021) | √ | √ | √ | √ | U | √ | √ | √ | √ | 8 |
| Wang, W.  (2021) | √ | √ | √ | √ | U | √ | √ | √ | √ | 8 |
| Tamirat, K. S.  (2021) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Gizachew, K. D.  (2021) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Ophinni, Y.  (2020) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Knettel, B. A.  (2020) | √ | √ | √ | √ | U | √ | √ | √ | √ | 8 |
| Kindaya, G. G.  (2020) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Nishijima, T.  (2020) | √ | √ | √ | √ | √ | √ | U | √ | √ | 8 |
| Durham,  M D. (2020) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Ruffieux, Y.  (2019) | √ | √ | √ | √ | √ | √ | U | √ | √ | 8 |
| Zeng, C. B.  (2018) | √ | √ | √ | √ | U | √ | √ | √ | √ | 8 |
| Zarei, N.  (2018) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Wang, W.  (2018) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Tang, X.  (2018) | √ | U | √ | √ | √ | √ | √ | √ | √ | 8 |
| Rodriguez, V. J.  (2018) a | √ | √ | U | √ | √ | √ | √ | √ | √ | 8 |
| Rodriguez, V. J. (2018) b | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Hentzien, M. (2018) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Lu, H. F.  (2018) | √ | √ | U | √ | √ | √ | √ | √ | √ | 8 |
| Oladeji, B. D. (2017) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Liu, Y.  (2017) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Lemsalu, Liis. (2017) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Egbe, C. O.  (2017) | √ | √ | √ | √ | √ | √ | U | √ | √ | 8 |
| Carrieri, M. P. (2017) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Bantjes, J.  (2017) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Rukundo, G. Z. (2016) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Kang, C. R.  (2016) | √ | U | √ | √ | √ | √ | √ | √ | √ | 8 |
| Cheung, C. C. (2016) | √ | √ | √ | √ | U | √ | √ | √ | √ | 8 |
| Wu, Y.  (2015) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Peltzer, K.  (2015) | √ | √ | √ | √ | N/A | √ | √ | √ | √ | 8 |
| Ogundipe, O. A. (2015) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Passos, S. M. K. (2014) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Ceccon, R. F.  (2014) | √ | U | √ | U | √ | √ | √ | √ | √ | 8 |
| Kinyanda, E.  (2012) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |
| Aldaz, P.  (2011) | √ | √ | √ | √ | √ | √ | √ | √ | N/A | 8 |
| Lawrence, S. T. (2010) | √ | √ | √ | √ | √ | √ | U | √ | √ | 8 |
| Keiser, O.  (2010) | √ | √ | √ | √ | √ | √ | √ | √ | √ | 9 |

Note: √ = Yes, X = No, U = Unclear, N/A = Not applicable

# Table S2. Suicidal ideation among people living with HIV with a meta-regression analysis of factors affecting heterogeneity

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | No of study | Sample | Prevalence (%) (95% CI) | *p-*value | I² | Coefficient | Standardized error | 95% confidence  interval | *p-*value |
| Sex | 19 | 14,381 | 98·1 (14·5–26·5) | <0·001 | 98·19 |  |  |  |  |
| Female | 16 | 5,172 | 21·0 (14·1–30·2) | <0·001 | 97·35 | Reference |  |  |  |
| Male | 15 | 9,209 | 18·6 (11·2–29·2) | <0·001 | 98·71 | −0.1509 | 0·394 | −0·92–0·62 | 0702 |
| Age | 14 | 14,421 | 17·0 (12·3–23·0) | <0·001 | 97·50 |  |  |  |  |
| ≥65 years old | 4 | 4,151 | 14·9 (4·7–38·7) | <0·001 | 97·41 | Reference |  |  |  |
| ≥45–64 years old | 10 | 4,320 | 13·6 (7·5–23·4) | <0·001 | 96·94 | −0·012 | 0·644 | −1·27–1·25 | 0·984 |
| 25–44 years old | 14 | 5,149 | 19·2 (12·0–29·2) | <0·001 | 97·70 | 0·398 | 0·617 | −0·81–1·60 | 0·519 |
| 15–24 years old | 10 | 801 | 19·6 (12·3–29·9) | <0·001 | 86·44 | −0·405 | 0·652 | −0·87–1·68 | 0·535 |
| Sexual orientation | 9 | 12,698 | 18.6 (12·4–26·8) | <0·001 | 98·14 |  |  |  |  |
| Heterosexual | 9 | 4,424 | 20·9 (10·5–37·3) | <0·001 | 98·47 | Reference |  |  |  |
| Homosexual | 9 | 5,642 | 17·1 (7·4–34·5) | <0·001 | 98·44 | −0·251 | 0·602 | −1·43–0·92 | 0·676 |
| Bisexual/  undecided | 9 | 2,632 | 17·9 (9·3–31·6) | <0·001 | 96·68 | −0·194 | 0·619 | −1·40–1·02 | 0·754 |
| Marital status | 21 | 7,922 | 27·1 (23·8–30·7) | <0·001 | 90·43 |  |  |  |  |
| Marriage | 18 | 2,724 | 25·1 (19·6–31·5) | <0·001 | 91·25 | Reference |  |  |  |
| Unmarried | 21 | 3,622 | 29·5 (24·2–35·3) | <0·001 | 90·91 | 0·219 | 0·211 | −0·19–0·63 | 0·299 |
| Separated/  divorced  /widowed | 14 | 1,576 | 26·3 (19·9–34·0) | <0·001 | 88·31 | 0·064 | 0·235 | −0·39–0·52 | 0·785 |
| Education level | 22 | 12,822 | 20·2 (16·5–24·5) | <0·001 | 95·75 |  |  |  |  |
| University or  higher | 17 | 3,506 | 20·7 (14·5–28·6) | <0·001 | 95·52 | Reference |  |  |  |
| Junior  college | 17 | 2,729 | 20·4 (14·3–28·2) | <0·001 | 94·17 | −0·009 | 0·330 | −0·65–0·63 | 0·977 |
| High school  or lower | 22 | 6,587 | 19·8 (13·8–27·6) | <0·001 | 96·50 | −0·009 | 0·330 | −0·65–0·63 | 0·881 |
| Employment status | 16 | 16,001 | 21·5 (15·6–28·8) | <0·001 | 98·40 |  |  |  |  |
| Employment | 16 | 8,084 | 18·0 (11·4–27·3) | <0·001 | 97·94 | Reference |  |  |  |
| Unemployment | 16 | 7,953 | 25·4 (16·3–37·4) | <0·001 | 98·62 | 0·438 | 0·397 | −0·34–1·21 | 0·270 |
| Monthly income | 9 | 3,264 | 27·8 (24·6–31·2) | <0·001 | 74·62 |  |  |  |  |
| High income | 5 | 668 | 22·6 (16·4–30·3) | <0·001 | 76·06 | Reference |  |  |  |
| Medium income | 7 | 1,108 | 26·5 (20·9–32·9) | <0·001 | 79·00 | 0·198 | 0·233 | −0·25–0·65 | 0·394 |
| Low income | 9 | 1,488 | 29·2 (26·9–31·6) | <0·001 | 70·81 | 0·437 | 0·223 | −0·01–0·85 | 0·051 |
| Exposure of antiviral therapy | 33 | 24,939 | 22·3 (17·3–28·2) | <0·001 | 98·69 |  |  |  |  |
| No treatments | 8 | 3,326 | 24·5 (16·1–35·4) | <0·001 | 97·43 | Reference |  |  |  |
| HAART | 3 | 1,588 | 21·4 (13·7–31·6) | <0·001 | 94·36 | −0·186 | 0·629 | −1·41–1·04 | 0·767 |
| Modern ART eras | 22 | 20,025 | 21·7 (15·4–29·5) | <0·001 | 98·94 | −0·157 | 0·384 | −0·91–0·59 | 0·681 |
| Substance use | 3 | 939 | 29·5 (15·8–48·2) | 0·032 | 95·91 |  |  |  |  |
| No Substance | 3 | 543 | 19·2 (12·0–29·3) | <0·001 | 84·31 | Reference |  |  |  |
| Substance | 3 | 396 | 43·1 (18·9–71·1) | <0·001 | 92·96 | 1·168 | 0·592 | 0·01–2·33 | **0·049** |
| Alcohol abuse | 10 | 13,991 | 26·0 (15·6–39·9) | <0·001 | 99·22 |  |  |  |  |
| No alcohol abuse | 10 | 12,848 | 20·6 (9·1–40·1) | <0·001 | 99·59 | Reference |  |  |  |
| Alcohol abuse | 10 | 1,143 | 32·4 (20·4–47·3) | <0·001 | 95·09 | −0·611 | 0·655 | −1·89–0·67 | 0·351 |
| Drug abuse | 7 | 11,203 | 19·5 (9·8–35·1) | <0·001 | 98·72 |  |  |  |  |
| No drug abuse | 7 | 10,479 | 12·4 (6·4–22·5) | <0·001 | 98·27 | Reference |  |  |  |
| Drug abuse | 7 | 724 | 24·5 (15·6–36·2) | <0·001 | 87·32 | −0·828 | 0·507 | −1·82–0·16 | 0·103 |
| Ever use of tobacco | 2 | 721 | 15·4 (9·4–24·4) | <0·001 | 75·97 |  |  |  |  |
| No use of tobacco | 2 | 688 | 11·7 (6·9–19·1) | <0·001 | 83·58 | Reference |  |  |  |
| Ever use of tobacco | 2 | 33 | 27·4 (14·9–44·9) | 0·013 | 0·00 | 1·035 | 0·534 | −0·01–2·08 | 0·053 |
| Psychiatric | 3 | 7,287 | 13·8 (5·7–29·7) | <0·001 | 97·57 |  |  |  |  |
| No psychiatric | 3 | 7,105 | 9·0 (2·6–27·3) | <0·001 | 98·70 | Reference |  |  |  |
| Psychiatric | 3 | 182 | 17·6 (12·6–23·9) | <0·001 | 44·72 | 1·026 | 0·955 | −0·84–2·89 | 0·283 |
| Opportunistic infections | 2 | 481 | 19·4 (8·6–38·2) | 0·003 | 89·05 |  |  |  |  |
| No opportunistic  infections | 2 | 419 | 12·1 (4·3–29·4) | 0·004 | 88·13 | Reference |  |  |  |
| Opportunistic  infections | 2 | 62 | 30·7 (20·5–43·2) | 0·783 | 0·00 | 1·189 | 0·666 | −0·11–2·49 | 0·075 |
| Depression | 9 | 9,842 | 18·3 (10·2–30·6) | <0·001 | 98·68 |  |  |  |  |
| No Depression | 9 | 4,125 | 8·6 (4·1–17·1) | <0·001 | 97·27 | Reference |  |  |  |
| Depression | 9 | 5,717 | 34·5 (16·4–58·6) | 0·204 | 98·95 | 1·720 | 0·661 | 0·42–3·01 | **0·009** |
| Anxiety | 5 | 7,579 | 21·0 (9·1–41·2) | 0·007 | 98·78 |  |  |  |  |
| No Anxiety | 4 | 5,809 | 12·3 (3·3–36·3) | 0·006 | 98·81 | Reference |  |  |  |
| Anxiety | 5 | 1,770 | 30·8 (9·9–64·2) | 0·255 | 98·51 | 1·152 | 1·012 | −0·83–3·13 | 0·255 |
| CD4+ cell count (cells/mm3) | 10 | 12,849 | 17·2 (11·5–25·0) | <0·001 | 97·61 |  |  |  |  |
| >500 | 10 | 7,567 | 13·8 (7·7–23·5) | <0·001 | 97·73 | Reference |  |  |  |
| ≤500 | 10 | 5,282 | 21·3 (12·0–35·0) | <0·001 | 98·04 | −0·530 | 0·486 | −1·48–0·42 | 0·276 |
| Viral load, copies/mL, | 4 | 7,696 | 13·9 (5·8–29·8) | <0·001 | 98·77 |  |  |  |  |
| Undetectable | 4 | 4,628 | 14·2 (3·3–44·9) | <0·001 | 98·95 | Reference |  |  |  |
| Detectable | 4 | 3,068 | 13·5 (3·3–41·6) | <0·001 | 98·83 | −0·058 | 1·121 | −2·15–2·13 | 0·958 |
| HIV-related clinical symptom | 3 | 1,085 | 28·9 (18·0–42·8) | 0·004 | 93·79 |  |  |  |  |
| With HIV-related  clinical symptom | 3 | 456 | 35·7 (31·4–40·2) | <0·001 | 62·86 | Reference |  |  |  |
| Without HIV-related  clinical symptom | 3 | 629 | 24·2 (11·3–44·6) | 0·015 | 92·31 | 0·580 | 0·459 | −0·32–1·48 | 0·207 |
| Quality of life | 2 | 852 | 20·6 (11·4–34·5) | <0·001 | 93·30 |  |  |  |  |
| High quality of life | 2 | 519 | 13·7 (11·0–17·0) | <0·001 | 66·12 | Reference |  |  |  |
| Low quality of life | 2 | 333 | 32·8 (27·9–38·0) | <0·001 | 0·00 | 1·116 | 0·254 | 0·61–1·61 | **<0**·**001** |
| Social support | 8 | 3,407 | 15·6 (11·2–21·5) | <0·001 | 93·61 |  |  |  |  |
| High social support | 8 | 1,869 | 10·6 (6·9–16·0) | <0·001 | 89·87 | Reference |  |  |  |
| Low social support | 8 | 1,538 | 22·6 (14·4–33·6) | <0·001 | 94·06 | 0·906 | 0·373 | 0·17–1·63 | **0**·**015** |
| HIV status disclosure | 4 | 1,461 | 17·1 (10·5–26·6) | <0·001 | 92·59 |  |  |  |  |
| With HIV status disclosure | 4 | 1,045 | 11·0 (7·0–17·0) | <0·001 | 84·10 | Reference |  |  |  |
| Without HIV status disclosure | 4 | 416 | 31·2 (26·9–35·9) | <0·001 | 43·05 | 1·125 | 0·340 | 0·45–1·79 | **<0**·**001** |
| Living alone | 6 | 2,030 | 27·0 (20·9–34·0) | <0·001 | 89·52 |  |  |  |  |
| Not living alone | 6 | 1,425 | 20·9 (15·9–27·0) | <0·001 | 83·58 | Reference |  |  |  |
| Living alone | 6 | 605 | 35·1 (25·6–45·9) | 0·007 | 83·19 | 0·718 | 0·276 | 0·17–1·25 | **0·009** |
| Residence | 7 | 2,696 | 18·3 (10·9–29·1) | <0·001 | 96·69 |  |  |  |  |
| Urban | 6 | 1,786 | 18·3 (7·0–40·0) | 0·007 | 98·30 | Reference |  |  |  |
| Rural | 7 | 910 | 20·0 (12·3–30·9) | <0·001 | 89·71 | –0·013 | 0·650 | –1·28–1·26 | 0·983 |
| Having children | 5 | 2,560 | 39·1 (37·2–41·0) | <0·001 | 75·65 |  |  |  |  |
| No children | 4 | 996 | 35·5 (27·7–44·3) | <0·001 | 85·69 | Reference |  |  |  |
| Having children | 5 | 1,564 | 40·4 (38·0–42·9) | 0·017 | 53·69 | 0·233 | 0·180 | −0·12–0·58 | 0·197 |
| High level of internalized stigma | 3 | 1,045 | 23·0 (13·6–36·2) | <0·001 | 94·02 |  |  |  |  |
| No internalized stigma | 3 | 619 | 17·7 (9·2–31·3) | <0·001 | 91·33 | Reference |  |  |  |
| High internalized stigma | 3 | 426 | 29·5 (11·8–56·8) | 0·135 | 95·49 | 0·674 | 0·684 | −0·66–2·01 | 0·324 |
| Memory problems | 2 | 852 | 22·1 (11·3–38·6) | <0·001 | 94·59 |  |  |  |  |
| Memory problems | 2 | 525 | 12·5 (7·30–20·5) | 0·025 | 80·16 | Reference |  |  |  |
| Without memory problems | 2 | 327 | 34·3 (29·30–39·6) | 0·344 | 0·00 | 1·364 | 0·363 | 0·65–2·07 | **<0·001** |
| Family history of suicide | 2 | 738 | 25·9 (16·1–38·8) | <0·001 | 88·60 |  |  |  |  |
| Not family history of suicide | 2 | 588 | 17·4 (11·5–25·4) | <0·001 | 79·97 | Reference |  |  |  |
| Family history of suicide | 2 | 150 | 42·9 (17·8–72·2) | 0·651 | 78·27 | 1·115 | 0·482 | 0·16–2·06 | **0·021** |
| Duration since known to have HIV | 9 | 95,233 | 14·2 (6·9–27·0) | <0·001 | 99·52 |  |  |  |  |
| >1 year | 9 | 22,585 | 15·3 (4·7–39·9) | <0·001 | 99·60 | Reference |  |  |  |
| ≤1 year | 6 | 72,648 | 12·5 (3·6–35·3) | <0·001 | 96·33 | 0·234 | 1·048 | –1·81–2·28 | 0·823 |
| SStage of HIV | 2 | 807 | 20·3 (11·9–32·5) | <0·001 | 90·11 |  |  |  |  |
| Stage I | 2 | 489 | 11·4 (3·9–29·1) | <0·001 | 93·55 | Reference |  |  |  |
| Stage II | 2 | 134 | 23·5 (16·9–31·7) | 0·055 | 72·77 | 0·592 | 0·721 | –0·82–2·00 | 0·411 |
| Stage III | 2 | 103 | 39·8 (30·8–49·5) | 0·947 | 0·00 | 1·625 | 1·705 | 0·24–3·00 | **0·021** |
| Stage IV | 2 | 81 | 17·3 (10·5–27·1) | 1·000 | 0·00 | 0·478 | 0·864 | –1·21–2·17 | 0·580 |
| WHO region | 33 | 24,939 | 22·3 (17·3–28·2) | <0·001 | 98·69 |  |  |  |  |
| European region | 2 | 3,210 | 17·6 (2·2–67·3) | <0·001 | 99·56 | Reference |  |  |  |
| Region of the  Americas | 6 | 9,972 | 21·3 (8·9–43·0) | <0·001 | 99·45 | 0·238 | 0·720 | –1·17–1·65 | 0·740 |
| South-East Asian  region | 1 | 86 | 23·3 (15·5–33·3) | 1·00 | 0·00 | 0·354 | 1·103 | –1·80–2·51 | 0·748 |
| African Region | 14 | 7,755 | 21·0 (15·4–27·9) | <0·001 | 97·82 | 0·218 | 0·666 | –1·08–1·52 | 0·743 |
| Eastern  Mediterranean region | 1 | 351 | 15·4 (12·0–19·5) | 1·00 | 0·00 | –1·156 | 1·083 | –2·28–1·52 | 0·743 |
| Western Pacific  region | 9 | 3,565 | 27·6 (21·8–34·3) | <0·001 | 94·10 | 0·575 | 0·689 | –0·77–1·92 | 0·404 |
| Settings | 33 | 24,939 | 22·3 (17·3–28·2) | <0·001 | 98·69 |  |  |  |  |
| Database | 1 | 414 | 8·2 (5·9–11·3) | 1·00 | 0·00 | Reference |  |  |  |
| Hospital | 15 | 10,746 | 25·4 (19·3–32·6) | <0·001 | 98·14 | 1·333 | 0·944 | –0·51–3·18 | 0·158 |
| Clinics | 17 | 13,779 | 20·9 (13·4–31·1) | <0·001 | 98·92 | 1·080 | 0·940 | –0·76–2·92 | 0·251 |
| Sample size | 33 | 24,939 | 22·3 (17·3–28·2) | <0·001 | 98·69 |  |  |  |  |
| >500 | 14 | 19,426 | 18·5 (11·8–27·8) | <0·001 | 99·31 | Reference |  |  |  |
| ≤500 | 19 | 5,513 | 25·5 (20·5–31·3) | <0·001 | 95·07 | 0·405 | 0·317 | −0·21–1·02 | 0·200 |
| Publication years | 33 | 24,939 | 22·3 (17·3–28·2) | <0·001 | 98·69 |  |  |  |  |
| >2015 | 25 | 20,114 | 21·6 (15·7–28·9) | <0·001 | 98·85 | Reference |  |  |  |
| ≤2015 | 8 | 4,825 | 24·6 (16·5–35·1) | <0·001 | 97·82 | 0·171 | 0·382 | −0·57–0·92 | 0·655 |

# Table S3. Suicide attempts among people living with HIV and a meta-regression analysis of factors affecting heterogeneity

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | No of study | Sample | Prevalence (%) (95% CI) | *p-*value | I² | Coefficient | Standardized error | 95% confidence  interval | *p-*value |
| Sex | 8 | 3,074 | 19·3 (12·5–28·5) | <0·001 | 95·96 |  |  |  |  |
| Female | 7 | 1,220 | 29·0 (15·4–47·9) | 0·151 | 95·94 | Reference |  |  |  |
| Male | 8 | 1,854 | 13·1 (6·6–24·3) | <0·001 | 96·43 | −0·999 | 0·566 | −2·10–0·10 | 0·077 |
| Age | 5 | 2,345 | 16·7 (10·7–25·1) | <0·001 | 94·61 |  |  |  |  |
| ≥65 years old | 1 | 84 | 11·9 (6·5–20·7) | 1·00 | 0·00 | Reference |  |  |  |
| ≥45–64 years old | 4 | 592 | 11·4 (4·6–26·7) | 0·004 | 93·11 | −0·016 | 1·078 | −2·12–2·09 | 0·988 |
| 25–44 years old | 5 | 1,600 | 17·0 (8·6–31·0) | 0·004 | 96·92 | 0·416 | 1·052 | −1·64–2·47 | 0·693 |
| 15–24 years old | 3 | 69 | 29·9 (9·7–63·0) | 0·004 | 81·95 | −2·001 | 0·967 | −3·89–0·10 | **0·039** |
| Sexual orientation | 3 | 1,360 | 37.0 (23·9–52·2) | <0·001 | 94·97 |  |  |  |  |
| Heterosexual | 3 | 795 | 53·7 (25·6–79·6) | <0·001 | 96·74 | Reference |  |  |  |
| Homosexual | 3 | 325 | 24·7 (8·0–55·4) | 0·295 | 92·34 | −1·264 | 0·786 | −2·80–0·27 | 0·108 |
| Bisexual/  undecided | 2 | 240 | 33·0 (26·9–39·6) | 0·288 | 11·55 | −0·866 | 0·858 | −2·54–0·81 | 0·313 |
| Marital status | 8 | 2,512 | 19·8 (15·7–24·5) | <0·001 | 84·63 |  |  |  |  |
| Marriage | 6 | 873 | 16·1 (10·0–24·7) | <0·001 | 81·86 | Reference |  |  |  |
| Unmarried | 8 | 1,078 | 21·2 (14·7–29·7) | <0·001 | 87·98 | 0·346 | 0·340 | −0·32–1·01 | 0·310 |
| Separated/  divorced  /widowed | 6 | 561 | 21·1 (17·8–24·8) | 0·003 | 71·95 | 0·349 | 0·368 | −0·37–1·07 | 0·343 |
| Education level | 9 | 5,677 | 13·1 (8·7–19·3) | <0·001 | 95·95 |  |  |  |  |
| University or  higher | 6 | 1,254 | 14·0 (5·7–30·2) | <0·001 | 96·53 | Reference |  |  |  |
| Junior  college | 7 | 1,292 | 12·5 (8·5–18·1) | <0·001 | 81·55 | −0·087 | 0·613 | −1·29–1·11 | 0·886 |
| High school  or lower | 9 | 3,131 | 12·5 (6·0–24·4) | 0·022 | 96·53 | −0·144 | 0·583 | −1·28–0·99 | 0·805 |
| Employment status | 8 | 3,317 | 17·7 (12·2–25·0) | <0·001 | 95·23 |  |  |  |  |
| Employment | 8 | 2,006 | 15·4 (10·5–22·1) | <0·001 | 91·63 | Reference |  |  |  |
| Unemployment | 8 | 1,311 | 20·3 (10·7–35·3) | <0·001 | 95·73 | 0·342 | 0·425 | −0·49–1·17 | 0·422 |
| Monthly income | 3 | 1,232 | 12·0 (7·8–18·0) | <0·001 | 84·70 |  |  |  |  |
| High income | 2 | 179 | 4·7 (0·6–29·8) | 0·006 | 77·81 | Reference |  |  |  |
| Medium income | 3 | 565 | 12·7 (8·4–18·8) | 0·058 | 64·81 | 0·721 | 0·693 | −0·63–2·07 | 0·298 |
| Low income | 3 | 488 | 14·3 (6·2–29·7) | <0·001 | 87·65 | 0·902 | 0·700 | −0·47–2·27 | 0·198 |
| Exposure of antiviral therapy | 17 | 9,149 | 9·6 (6·3–14·6) | <0·001 | 97·68 |  |  |  |  |
| No treatments | 2 | 1,343 | 12·5 (0·8–72·1) | <0·001 | 99·24 | Reference |  |  |  |
| HAART | 3 | 1,347 | 10·9 (2·4–38·2) | <0·001 | 98·41 | −0·196 | 0·759 | −1·68–1·29 | 0·796 |
| Modern ART eras | 12 | 6,459 | 9·0 (6·9–11·6) | <0·001 | 89·91 | −0·429 | 0·635 | −1·67–0·81 | 0·499 |
| Depression | 4 | 1,783 | 20·3 (9·9–37·1) | <0·001 | 97·79 |  |  |  |  |
| No Depression | 4 | 1,101 | 11·0 (6·2–18·8) | <0·001 | 90·39 | Reference |  |  |  |
| Depression | 3 | 682 | 40·8 (23·4–60·8) | <0·001 | 95·48 | 1·726 | 0·521 | 0·70–2·74 | **<0·001** |
| CD4+ cell count (cells/mm3) | 4 | 1,796 | 12·3 (6·4–22·3) | <0·001 | 94·72 |  |  |  |  |
| >500 | 4 | 919 | 11·1 (3·8–28·1) | <0·001 | 96·25 | Reference |  |  |  |
| ≤500 | 4 | 877 | 13·6 (5·2–31·1) | <0·001 | 94·10 | 0·236 | 0·798 | −1·32–1·80 | 0·767 |
| Residence | 4 | 1,627 | 14·7 (6·2–30·8) | <0·001 | 97·14 |  |  |  |  |
| Urban | 4 | 1,143 | 19·5 (4·5–55·3) | <0·001 | 98·71 | Reference |  |  |  |
| Rural | 4 | 484 | 14·9 (11·9–18·6) | 0·041 | 63·72 | –0·764 | 1·098 | –2·91–1·38 | 0·487 |
| Family history of suicide | 2 | 738 | 25·9 (16·1–38·8) | <0·001 | 88·60 |  |  |  |  |
| Not family history of suicide | 2 | 588 | 17·4 (11·5–25·4) | <0·001 | 79·97 | Reference |  |  |  |
| Family history of suicide | 2 | 150 | 42·9 (17·8–72·2) | 0·651 | 78·27 | 1·115 | 0·482 | 0·16–2·06 | **0·021** |
| Duration since known to have HIV | 4 | 1,873 | 11·4 (4·1–27·9) | <0·001 | 97·71 |  |  |  |  |
| >1 year | 4 | 1,817 | 11·9 (3·4–33·9) | <0·001 | 98·58 | Reference |  |  |  |
| ≤1 year | 2 | 56 | 10·9 (5·0–22·2) | <0·001 |  | –0·157 | 1·243 | –2·59–2·27 | 0·899 |
| WHO region | 17 | 9,194 | 9·6 (6·3–14·6) | 0·651 | 97·68 |  |  |  |  |
| European region | 1 | 349 | 7·7 (5·4–11·0) | 1·00 | 0·00 | Reference |  |  |  |
| Region of the  Americas | 3 | 1,848 | 20·9 (10·0–38·7) | 1·00 | 96·25 | 1·152 | 1·316 | –1·42–3·73 | 0·381 |
| African Region | 9 | 5,511 | 6·9 (2·9–15·3) | <0·001 | 98·68 | –0·126 | 1·202 | –2·48–2·23 | 0·917 |
| Western Pacific  region | 4 | 1,441 | 11·2 (9·6–13·1) | 0·341 | 10·38 | 0·431 | 1·275 | –2·06–2·93 | 0·735 |
| Settings | 17 | 9,194 | 9·6 (6·3–14·6) | 0·651 | 97·68 |  |  |  |  |
| Hospital | 11 | 5,859 | 11·4 (6·8–18·6) | <0·001 | 97·91 | Reference |  |  |  |
| Clinics | 6 | 3,290 | 7·0 (4·3–11·2) | <0·001 | 91·71 | –0·535 | 0·460 | –1·43–0·36 | 0·244 |
| Sample size | 17 | 9,194 | 9·6 (6·3–14·6) | 0·651 | 97·68 |  |  |  |  |
| >500 | 6 | 5,536 | 7·5 (2·9–18·1) | <0·001 | 99·08 | Reference |  |  |  |
| ≤500 | 11 | 3,613 | 11·1 (7·8–15·5) | <0·001 | 92·10 | 0·414 | 0·519 | −0·60–1·43 | 0·424 |
| Publication years | 17 | 9,194 | 9·6 (6·3–14·6) | 0·651 | 97·68 |  |  |  |  |
| >2015 | 15 | 6,971 | 10·0 (6·0–16·2) | <0·001 | 97·81 | Reference |  |  |  |
| ≤2015 | 2 | 2,178 | 7·3 (2·1–22·3) | <0·001 | 97·16 | −0·342 | 0·808 | −1·92–1·24 | 0·672 |

# Table S4. Total suicides among people living with HIV and meta-regression analysis of factors affecting heterogeneity

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variable | No of study | Sample | Prevalence (%) (95% CI) | *p-*value | I² | Coefficient | Standardized error | 95% confidence  interval | *p-*value |
| Sex | 4 | 132,247 | 1·4 (1·0–1·8) | <.001 | 98·86 |  |  |  |  |
| Female | 4 | 27,580 | 1·2 (0·5−2·6) | <.001 | 96·88 | Reference |  |  |  |
| Male | 4 | 104,667 | 1·5 (1·0−2·4) | <.001 | 97·58 | 0·288 | 0·388 | −0·47–1·04 | 0·457 |
| Sexual orientation | 3 | 115,256 | 1·3 (0·8−2·1) | <.001 | 98·54 |  |  |  |  |
| Heterosexual | 2 | 90,901 | 1·0 (0·2−4·7) | <.001 | 98·17 | Reference |  |  |  |
| Homosexual | 2 | 12,544 | 2·5 (0·6−9·1) | <.001 | 99·04 | 1·225 | 0·827 | −0·39–2·84 | 0·139 |
| Bisexual/  undecided | 2 | 11,811 | 1·5 (1·3−1·7) | 0·530 | 0·00 | 0·693 | 0·828 | −0·92–2·31 | 0·402 |
| Exposure of antiviral therapy | 8 | 144,723 | 1·7 (1·0−2·8) | <.001 | 98·86 |  |  |  |  |
| Pre-HAART | 2 | 35.411 | 1·0 (0·9−1·1) | 0·771 | 0·00 | Reference |  |  |  |
| HAART | 3 | 12,852 | 3·9 (0·8−17·3) | <.001 | 99·39 | 1·400 | 0·909 | −0·38–3·18 | 0·124 |
| Modern ART eras | 1 | 2.797 | 0·5 (0·3−0·8) | 1·00 | 0·00 | −0·694 | 1·245 | −3·13–1·74 | 0·577 |
| No treatments | 2 | 93,663 | 1·3 (0·3−4·5) | <.001 | 92·05 | 0·225 | 1·010 | −1·75–2·20 | 0·823 |
| Psychiatric | 2 | 35,411 | 1·9 (0·9−4·1) | <.001 | 98·07 |  |  |  |  |
| No psychiatric | 2 | 27,623 | 0·8 (0·7−0·9) | 0·529 | 0·00 | Reference |  |  |  |
| Psychiatric | 2 | 7,788 | 4·5 (0·4−34·3) | <.001 | 98·91 | 1·717 | 0·813 | 0·12–3·31 | **0·035** |
| WHO region | 8 | 144,723 | 1·7 (1·0−2·8) | <.001 | 98·86 |  |  |  |  |
| European region | 5 | 41,223 | 2·0 (0·7−5·5) | <.001 | 99·21 | Reference |  |  |  |
| Region of the  Americas | 1 | 8,185 | 1·4 (1·2−1·7) | 1·00 | 0·00 | −0·344 | 1·315 | −2·92–2·23 | 0·793 |
| Western Pacific  region | 2 | 95,315 | 1·1 (0·2−4·8) | 1·00 | 96·98 | −0·593 | 1·012 | −2·57–1·39 | 0·558 |
| Settings | 8 | 144,723 | 1·7 (1·0−2·8) | <.001 | 98·86 |  |  |  |  |
| Database | 6 | 141,577 | 1·3 (0·9−2·0) | <.001 | 97·95 | Reference |  |  |  |
| Hospital | 2 | 3,146 | 3·5 (0·1−62·3) | <.001 | 99·41 | 1·116 | 0·551 | 0·03–2·19 | **0·043** |
| Sample size | 6 | 144,723 | 1·7 (1·0−2·8) | <.001 | 98·86 |  |  |  |  |
| >500 | 5 | 144,374 | 1·2 (0·8−1·7) | <.001 | 97·78 | Reference |  |  |  |
| ≤500 | 1 | 349 | 20·1 (16·2−24·6) | 1·00 | 0·00 | 3·066 | 0·575 | 1·93–4·19 | <.**0·001** |
| Publication years | 8 | 144,723 | 1·7 (1·0−2·8) | <.001 | 98·86 |  |  |  |  |
| >2015 | 5 | 123,985 | 2·1 (1·0−4·4) | <.001 | 99·21 | Reference |  |  |  |
| ≤2015 | 3 | 20,738 | 1·1 (0·6−2·0) | <.001 | 92·52 | −0·686 | 0·611 | −1·88–0·51 | 0·262 |