**Supplementary Table 1 Sample characteristics by concomitant medication exposure (all covariates)**

| **Variables** |  | **Concomitant medications** | | | |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Total sample (n=522)** | **None (0) (n=130)** | **≥1**  **(n=392)** | **1-4**  **(n=270)** | **≥5**  **(n=122)** | **p-value for trenda** |
|  | **n (%) or mean (SD)** | **n (%) or mean (SD)** | **n (%) or mean (SD)** | **n (%) or mean (SD)** | **n (%) or mean (SD)** |  |
| **Demographic characteristics** |  |  |  |  |  |  |
| Age (years; mean, SD) | 50.8 (12.3) | 41.9 (12.4) | 53.8 (10.8) | 52 (11.0) | 57.4 (9.4) | **<0.001** |
| Gender (male) | 494 (94.6) | 117 (90.0) | 376 (96.0) | 256 (94.8) | 120 (98.4) | **0.006** |
| Men who have sex with men | 410 (78.5) | 100 (76.9) | 309 (78.8) | 208 (77.0) | 101 (82.8) | 0.402 |
| Australian born | 322 (61.6) | 62 (47.7) | 259 (66.1) | 172 (63.7) | 87 (71.3) | **<0.001** |
| Living alone | 212 (40.5) | 28 (21.5) | 183 (46.7) | 117 (43.3) | 66 (54.1) | **<0.001** |
| Speaks English at home | 493 (94.3) | 110 (84.6) | 382 (97.4) | 261 (96.7) | 121 (99.2) | **<0.001** |
| Ability to read, speak and understand English  rated as ‘excellent’ | 427 (81.6) | 127 (97.7) | 318 (81.1) | 219 (81.1) | 99 (81.1) | 0.192 |
| Australian citizen | 461 (88.1) | 98 (75.4) | 362 (92.3) | 245 (90.7) | 117 (95.9) | **<0.001** |
| Has Medicare access | 508 (97.1) | 120 (92.3) | 387 (98.7) | 266 (98.5) | 121 (99.2) | **0.001** |
| Met Medicare safety netb in last 12 months | 94 (18.0) | 12 (9.2) | 81 (20.7) | 40 (14.8) | 41 (33.6) | **<0.001** |
| Has private health insurance | 221 (42.3) | 63 (48.5) | 158 (40.3) | 119 (44.1) | 39 (32.0) | **0.010** |
| Lives in a major city | 452 (86.4) | 118 (90.8) | 332 (84.7) | 225 (83.3) | 107 (87.7) | 0.269 |
| University educated | 197 (38.0) | 56 (43.1) | 141 (36.0) | 97 (35.9) | 44 (36.1) | 0.211 |
| **Financial / employment status** |  |  |  |  |  |  |
| On social welfare | 212 (40.6) | 21 (16.2) | 191 (48.7) | 110 (40.7) | 81 (66.4) | **<0.001** |
| Required financial assistance in last 12 months | 138 (26.4) | 23 (17.7) | 127 (32.4) | 78 (28.9) | 49 (40.2) | **<0.001** |
| Unemployed | 226 (43.2) | 33 (25.4) | 193 (49.2) | 111 (41.1) | 82 (67.2) | **<0.001** |
| Underemployed (would increase hours) | 220 (42.1) | 52 (40.0) | 167 (42.6) | 108 (40.0) | 59 (48.4) | 0.168 |
| Weekly income after tax (median, IQR) | 645 (580) | 815 (843) | 500 (665) | 570 (640) | 432 (600) | 0.499 |
| Lives in public-subsidized accommodation | 105 (20.1) | 12 (9.2) | 92 (23.5) | 51 (18.9) | 41 (33.6) | **<0.001** |
| Lives with someone financially dependent on them | 48 (9.2) | 15 (11.5) | 33 (8.4) | 20 (7.4) | 13 (10.7) | 0.798 |
| Received financial assistance in last 12 months: |  |  |  |  |  |  |
| from family | 42 (21.8) | 7 (5.4) | 35 (8.9) | 23 (8.5) | 12 (9.8) | 0.406 |
| from Centrelinkc | 97 (18.6) | 13 (10.0) | 84 (21.4) | 45 (16.7) | 39 (32.0) | 0.229 |
| from partner | 18 (3.4) | 4 (3.1 | 14 (3.6) | 10 (3.7) | 4 (3.3) | 0.205 |
| from non-governmental organization | 80 (15.3) | 12 (9.2) | 67 (17.1) | 33 (12.2) | 34 (27.9) | 0.258 |
| In previous 12 months, for financial reasons, had  to forego food, groceries, rent, household bills,  furniture, clothing, white goods | 114 (21.8) | 17 (13.1) | 97 (24.7) | 62 (23.0) | 35 (28.7) | **0.004** |
| **HIV healthcare and treatment access** |  |  |  |  |  |  |
| Uses the following for HIV management: |  |  |  |  |  |  |
| hospital based HIV clinic | 254 (48.7) | 59 (45.4) | 195 (49.7) | 123 (45.6) | 72 (59.0) | **0.039** |
| health center specialized in HIV treatment | 135 (25.9) | 25 (19.2) | 110 (28.1) | 73 (27.0) | 37 (30.3) | 0.055 |
| community based general practice | 174 (33.3) | 16 (12.3) | 158 (40.3) | 95 (35.2) | 63 (51.6) | **<0.001** |
| sexual health clinic / center | 168 (32.2) | 56 (43.1) | 112 (28.6) | 79 (29.3) | 33 (27.0) | **0.007** |
| naturopath | 26 (5.0) | 4 (3.1) | 22 (5.6) | 12 (4.4) | 10 (8.2) | 0.062 |
| hospital pharmacy | 259 (49.6) | 44 (33.8) | 215 (54.8) | 137 (50.7) | 78 (63.9) | **<0.001** |
| home or community care | 14 (2.3) | 1 (0.8) | 13 (3.3) | 8 (3.0) | 5 (4.1) | 0.098 |
| drug or alcohol services | 9 (1.7) | - | 9 (2.3) | 5 (1.9) | 4 (3.3) | **0.044** |
| HIV community organization or support group | 77 (14.8) | 15 (11.5) | 62 (15.8) | 32 (11.9) | 30 (24.6) | **0.004** |
| Primary HIV physician: |  |  |  |  |  |  |
| general practitioner | 181 (34.7) | 27 (20.8) | 154 (39.3) | 106 (39.3) | 48 (39.3) | **0.001** |
| hospital physician | 223 (42.7) | 58 (44.6) | 165 (42.1) | 109 (40.4) | 56 (45.9) | 0.914 |
| sexual health physician | 114 (21.8) | 41 (31.5) | 73 (18.6) | 55 (20.4) | 18 (14.8) | **0.001** |
| Study enrolment site: |  |  |  |  |  |  |
| high-caseload general practice | 145 (27.8) | 8 (6.2) | 137 (34.9) | 92 (34.1) | 45 (36.9) | **<0.001** |
| hospital located clinic | 174 (33.3) | 31 (23.8) | 143 (36.5) | 92 (34.1) | 51 (41.8) | **0.002** |
| sexual health clinic / center | 203 (38.9) | 91 (70.0) | 112 (28.6) | 86 (31.9) | 26 (21.3) | **<0.001** |
| Feels actively involved in HIV management | 506 (96.9) | 127 (97.7) | 379 (96.7) | 261 (96.7) | 118 (96.7) | 0.920 |
| Consults primary HIV physician at least every  6 months | 512 (98.1) | 126 (96.9) | 386 (98.5) | 265 (98.1) | 121 (99.2) | 0.193 |
| Duration of care from primary HIV physician  (years: mean, SD) | 11.3 (8.0) | 7.6 (6.9) | 12.4 (8.0) | 11.5 (8.0) | 14.6 (7.8) | **<0.001** |
| Changed primary HIV physician in last 12 months | 80 (15.3) | 32 (24.6) | 51 (13.0) | 37 (13.7) | 14 (11.5) | **0.016** |
| No patient payment for HIV consultations | 288 (82.8) | 52 (40.0) | 236 (60.2) | 152 (56.3) | 84 (68.9) | 0.341 |
| Seen other medical specialist in last 12 months | 321 (61.5) | 60 (46.2) | 261 (66.6) | 167 (61.9) | 95 (77.9) | **<0.001** |
| Other healthcare providers involved in HIV care | 324 (62.1) | 63 (48.5) | 261 (66.6) | 169 (62.6) | 92 (75.4) | **<0.001** |
| Cost (A$ last 12 months; mean, SD)  healthcare services | 281 (616) | 182 (361) | 314 (678) | 373 (765) | 177 (381) | 0.912 |
| alternative healthcare services | 675 (1161) | 380 (342) | 736 (1263) | 998 (1254) | 453 (1219) | 0.837 |
| a barrier to accessing medical services | 71 (13.6) | 14 (10.8) | 57 (14.5) | 38 (14.1) | 19 (15.6) | 0.384 |
| ART pharmacy charges patient co-payment | 292 (55.8) | 69 (53.1) | 223 (56.9) | 151 (56.0) | 72 (59.0) | 0.396 |
| most recent HIV medications | 106 (410) | 136 (382) | 96 (418) | 104 (475) | 77 (246) | 0.274 |
| Cost (A$, last 3 months; mean, SD)  non-HIV medications | 145 (434) | 107 (644) | 157 (335) | 129 (187) | 224 (537) | **0.041** |
| all health needs (except medications) | 303 (1135) | 224 (823) | 330 (1224) | 324 (942) | 343 (1716) | 0.401 |
| **HIV history** |  |  |  |  |  |  |
| HIV diagnosed prior to 1996 | 213 (40.8) | 22 (16.9) | 191 (48.7) | 113 (41.9) | 78 (63.9) | **<0.001** |
| Male-to-male sexual transmission of HIV | 406 (77.6) | 106 (81.5) | 300 (76.5) | 207 (76.7) | 93 (76.2) | 0.402 |
| Nadir CD4 T-lymphocyte count <200 cells/mm3 | 202 (38.7) | 34 (26.2) | 168 (42.9) | 112 (41.5) | 56 (45.9) | **<0.001** |
| Previous AIDS | 120 (22.9) | 13 (10.0) | 107 (27.3) | 62 (23.0) | 45 (36.9) | **<0.001** |
| **Comorbidities** |  |  |  |  |  |  |
| Heart disease | 57 (10.9) | 2 (1.5) | 55 (14.0) | 24 (8.9) | 31 (25.4) | **<0.001** |
| Hypertension | 94 (18.0) | 2 (1.5) | 92 (23.5) | 51 (18.9) | 41 (33.6) | **<0.001** |
| Stroke | 9 (1.7) | - | 9 (2.3) | 3 (1.1) | 6 (4.9) | **0.003** |
| Peripheral vascular disease | 8 (1.50) | - | 8 (2.0) | 3 (1.1) | 5 (4.1) | **0.008** |
| Diabetes | 31 (5.9) | - | 31 (7.9) | 13 (4.8) | 18 (14.8) | **<0.001** |
| Chronic liver failure | 2 (0.4) | - | 2 (0.5) | - | 2 (1.6) | **0.038** |
| Chronic kidney disease | 14 (2.7) | - | 14 (3.6) | 8 (3.0) | 6 (4.9) | **0.015** |
| Other diagnosed comorbidityd | 102 (19.5) | 7 (5.4) | 95 (24.2) | 62 (23.0) | 33 (27.0) | **<0.001** |
| **Current health** |  |  |  |  |  |  |
| CD4 T-lymphocyte count (mean, SD) | 659 (273) | 663 (241) | 657 (283) | 667 (289) | 635 (269) | 0.439 |
| Length of undetectable HIV viral load >1 year | 399 (76.4) | 91 (70.0) | 308 (78.6) | 205 (76.0) | 103 (84.4) | **0.007** |
| Currently enrolled on a clinical trial | 45 (8.6) | 4 (3.1) | 41 (10.5) | 25 (9.3) | 16 (13.1) | **0.004** |
| Anaemiae | 33 (6.3) | 4 (3.1) | 10 (2.6) | 5 (1.9) | 5 (4.1) | 0.620 |
| Elevated ALTf (>40 U/L males, >35 U/L females) | 130 (24.9) | 36 (27.7) | 95 (24.2) | 64 (23.7) | 31 (25.4) | 0.613 |
| eGFRg <60 mls/min/1.73m2 | 43 (8.2) | 6 (4.6) | 37 (9.4) | 14 (5.2) | 23 (18.9) | **<0.001** |
| Hepatitis B or C co-infection | 70 (13.4) | 3 (2.3) | 65 (16.6) | 46 (17.0) | 19 (15.6) | **0.001** |
| Sexually transmitted infection in last 12 months | 71 (13.6) | 28 (21.5) | 42 (10.7) | 33 (12.2) | 9 (7.4) | **0.001** |
| Hospitalized for ≥1 night in last 12 months | 108 (20.7) | 16 (12.3) | 92 (23.5) | 57 (21.1) | 35 (28.7) | **0.001** |
| Missed ≥1 clinic appointment in last 12 months | 71 (13.6) | 26 (20.0) | 46 (11.7) | 26 (9.6) | 20 (16.4) | 0.398 |
| **Physical health** |  |  |  |  |  |  |
| Self-reported good / very good overall health | 435 (83.3) | 118 (90.8) | 316 (80.6) | 223 (82.6) | 93 (76.2) | **0.002** |
| ≥1 bed days for illness in last 12 months | 284 (54.4) | 73 (56.2) | 211 (53.8) | 148 (54.8) | 63 (51.6) | 0.484 |
| ≥1 doctor visits for illness in last 12 months | 358 (68.6) | 83 (63.8) | 275 (70.2) | 184 (68.1) | 91 (74.6) | **0.044** |
| >1 hospital inpatient day in last 12 months | 100 (19.2) | 14 (10.8) | 86 (21.9) | 53 (19.6) | 33 (27.0) | 0.438 |
| **Mental health** |  |  |  |  |  |  |
| Major depressive disorder (PHQ-9 [23]) | 87 (16.7) | 12 (9.2) | 75 (19.1) | 45 (16.7) | 30 (24.6) | **0.001** |
| Psychiatric illness – currently clinically active | 112 (24.3) | 4 (3.1) | 108 (27.6) | 66 (24.4) | 42 (34.4) | **<0.001** |
| **Cognitive function** |  |  |  |  |  |  |
| Neurocognitive impairment | 148 (28.3) | 42 (32.3) | 106 (27.0) | 72 (26.7) | 34 (27.9) | 0.369 |
| **Alcohol and drug use** |  |  |  |  |  |  |
| Alcohol dependent (CAGE [27]) | 106 (20.3) | 29 (22.3) | 77 (19.6) | 58 (21.5) | 19 (15.6) | 0.176 |
| Use of following monthly or more in last 12 months |  |  |  |  |  |  |
| cigarettes | 143 (27.4) | 29 (22.3) | 114 (29.1) | 82 (30.4) | 32 (26.2) | 0.441 |
| marijuana / hash | 94 (18.0) | 14 (10.8) | 80 (20.4) | 63 (23.3) | 17 (13.9) | 0.448 |
| amyl / poppers | 67 (12.8) | 18 (13.8) | 49 (12.5) | 39 (14.4) | 10 (8.2) | 0.197 |
| benzodiazepines | 39 (7.5) | - | 39 (9.9) | 18 (6.7) | 21 (17.2) | **<0.001** |
| ecstasy | 1 (0.2) | 1 (0.8) | - | - | - | 0.156 |
| injected speed / amphetamines | 20 (3.8) | 2 (1.5) | 18 (4.6) | 12 (4.4) | 6 (4.9) | 0.153 |
| snorted or smoked speed / amphetamines | 17 (3.3) | 2 (1.5) | 15 (3.8) | 11 (4.1) | 4 (3.3) | 0.415 |
| injected cocaine | 2 (0.4) | 1 (0.8) | 1 (0.3) | 1 (0.4) | - | 0.324 |
| snorted cocaine | 3 (0.6) | 2 (1.5) | 1 (0.3) | 1 (0.4) | - | 0.104 |
| crystal methamphetamine | 23 (4.4) | 4 (3.1) | 21 (5.4) | 15 (5.6) | 6 (4.9) | 0.177 |
| GHB / GBH / liquid E / fantasy | 6 (1.1) | - | 3 (0.8) | 3 (1.1) | 3 (2.5) | 0.066 |
| LSD | 2 (0.4) | - | 2 (0.5) | 2 (0.7) | - | 0.972 |
| PDE5 inhibitor (“viagra” or ‘similar’) | 67 (12.8) | 9 (6.9) | 58 (14.8) | 36 (13.3) | 22 (18.0) | **0.008** |
| heroin | 3 (0.6) | - | 3 (0.8) | 3 (1.1) | - | 0.966 |
| methadone | 9 (1.7) | - | 7 (1.8) | 5 (1.9) | 2 (1.6) | 0.245 |
| opiates | 11 (2.1) | - | 11 (2.8) | 4 (1.5) | 7 (5.7) | **0.002** |
| **Life stressors** |  |  |  |  |  |  |
| > 2 major stress events in last 12 months | 133 (25.5) | 20 (15.4) | 113 (28.8) | 76 (28.1) | 37 (30.3) | **0.005** |
| **Social support** |  |  |  |  |  |  |
| Married / de facto / in regular relationship | 226 (43.2) | 64 (49.2) | 158 (40.3) | 147 (54.4) | 87 (71.3) | **0.001** |
| In serodiscordant sexual relationship | 136 (26.0) | 46 (35.4) | 90 (23.0) | 71 (26.3) | 19 (15.6) | **0.047** |
| Received less social support than wanted/needed | 302 (57.9) | 66 (50.8) | 236 (60.2) | 167 (61.9) | 69 (56.6) | 0.357 |
| Not linked to an HIV support organization | 388 (74.3) | 115 (88.5) | 330 (84.2) | 238 (88.1) | 92 (75.4) | **0.004** |
| **HIV disclosure, stigma and discrimination** |  |  |  |  |  |  |
| Did not disclose HIV status | 25 (4.8) | 6 (4.6) | 19 (4.8) | 12 (4.4) | 7 (5.7) | 0.672 |
| Made to feel ashamed of HIV diagnosis | 224 (43.0) | 54 (41.5) | 170 (43.4) | 116 (43.0) | 54 (44.3) | 0.623 |
| Felt blamed for having HIV | 173 (33.1) | 40 (30.8) | 133 (33.9) | 89 (33.0) | 44 (36.1) | 0.349 |
| Felt avoided, excluded or rejected for having HIV | 214 (41.0) | 47 (36.2) | 167 (42.6) | 109 (40.4) | 58 (47.5) | 0.060 |
| Had awkward interactions for having HIV | 248 (47.5) | 57 (43.8) | 191 (48.7) | 132 (48.9) | 59 (48.4) | 0.428 |
| **Antiretroviral therapy** |  |  |  |  |  |  |
| ART as a single tablet regimen | 158 (30.3) | 55 (42.3) | 103 (26.3) | 81 (30.0) | 22 (18.0) | **<0.001** |
| Once-daily ART dosing | 333 (63.7) | 102 (78.5) | 231 (58.9) | 169 (62.6) | 62 (50.8) | **<0.001** |
| ART requires fasting / food conditions | 351 (67.2) | 90 (69.2) | 262 (66.8) | 178 (66.0) | 84 (68.9) | 0.917 |
| Commenced ART within one year of diagnosis | 245 (46.8) | 77 (59.2) | 168 (42.9) | 118 (43.7) | 50 (41.0) | **<0.001** |
| Commenced ART prior to 2004 | 247 (47.3) | 26 (20.0) | 221 (56.4) | 134 (50.0) | 87 (71.3) | **<0.001** |
| Receiving ART through a clinical trial | 28 (5.4) | 3 (2.3) | 25 (6.4) | 13 (4.8) | 12 (9.8) | 0.733 |
| Receiving ART through directly observed therapy  (DOT) | 8 (1.5) | 1 (0.8) | 7 (1.8) | 6 (2.2) | 1 (0.8) | 0.937 |
| When started ART felt ‘not at all’ / ’only somewhat’  informed about ART: |  |  |  |  |  |  |
| side effects | 178 (34.1) | 34 (26.2) | 144 (36.7) | 95 (35.2) | 49 (40.2) | **0.020** |
| benefits | 115 (22.0) | 18 (13.8) | 97 (24.7) | 57 (21.1) | 40 (32.8) | **<0.001** |
| dosing requirements | 44 (8.4) | 7 (5.4) | 37 (9.4) | 22 (8.1) | 15 (12.3) | **0.045** |
| lifestyle impacts | 151 (28.9) | 26 (20.0) | 125 (31.9) | 79 (29.3) | 46 (37.7) | **0.002** |
| own ART regimen | 106 (20.3) | 16 (12.3) | 90 (23.0) | 56 (20.7) | 34 (27.9) | **0.003** |
| Reason for starting ART: |  |  |  |  |  |  |
| to prevent HIV disease progression to AIDS | 325 (62.6) | 76 (58.5) | 249 (63.5) | 169 (62.6) | 80 (65.6) | 0.260 |
| to reduce HIV symptoms | 167 (32.2) | 39 (30.0) | 128 (32.7) | 86 (31.9) | 42 (34.4) | 0.426 |
| to prevent transmission to HIV-negative partners | 101 (19.5) | 36 (27.7) | 65 (16.6) | 45 (16.7) | 20 (16.4) | **0.023** |
| to prevent transmission to the community | 94 (18.1) | 29 (22.3) | 65 (16.6) | 49 (18.1) | 16 (13.1) | 0.063 |
| due to high viral load | 233 (44.9) | 52 (40.0) | 181 (46.2) | 121 (44.8) | 60 (49.2) | 0.127 |
| due to low CD4 t-lymphocyte cell count | 263 (50.7) | 68 (52.3) | 195 (49.7) | 132 (48.9) | 63 (51.6) | 0.856 |
| following doctor’s advice | 328 (63.2) | 75 (57.7) | 253 (64.5) | 174 (64.4) | 79 (64.8) | 0.256 |
| following their own request | 64 (12.3) | 25 (19.2) | 39 (9.9) | 24 (8.9) | 15 (12.3) | 0.088 |
| Never speaks with HIV doctors or nurses about: |  |  |  |  |  |  |
| balancing ART regimen with overall health and  lifestyle | 174 (33.5) | 38 (29.2) | 136 (34.7) | 95 (35.2) | 41 (33.6) | 0.531 |
| side effects associated with ART | 101 (19.5) | 24 (18.5) | 77 (19.6) | 60 (22.2) | 17 (13.9) | 0.420 |
| delaying, interrupting or changing ART | 250 (48.3) | 62 (47.7) | 188 (48.0) | 132 (48.9) | 56 (45.9) | 0.602 |
| cost burden of ART | 425 (82.1) | 95 (73.1) | 330 (84.2) | 227 (84.1) | 103 (84.4) | **0.025** |
| I forget to take ART medications | 242 (46.4) | 58 (44.6) | 184 (46.9) | 135 (50.0) | 49 (40.2) | 0.541 |
| I am careless at times about taking ART | 86 (16.5) | 17 (13.1) | 69 (17.6) | 49 (18.1) | 20 (16.4) | 0.446 |
| Sometimes if I feel worse I stop taking ART  medications | 48 (9.2) | 4 (3.1) | 44 (11.2) | 27 (10.0) | 17 (13.9) | **0.005** |
| Skipped ART once or more last weekend | 35 (6.7) | 7 (5.4) | 28 (7.1) | 22 (8.1) | 6 (4.9) | 0.920 |
| Experienced ART side effects in last 12 months | 297 (56.9) | 62 (47.7) | 235 (59.9) | 156 (57.8) | 79 (64.8) | **0.007** |
| Experienced difficulty accessing pharmacy for  ART | 32 (6.1) | 5 (3.8) | 27 (6.9) | 22 (8.1) | 5 (4.1) | 0.885 |
| Missed ART once or more in last week | 83 (15.9) | 15 (11.5) | 68 (17.3) | 48 (17.8) | 20 (16.4) | 0.309 |
| Delayed / interrupted ART in last 12 months | 34 (6.5) | 5 (3.8) | 29 (7.4) | 21 (7.8) | 8 (6.6) | 0.359 |
| Delayed / interrupted ART for ≥1 week in last 12 months | 20 (4.0) | 3 (5.3) | 17 (4.3) | 15 (5.6) | 2 (1.6) | 0.262 |
| Doctor unaware of ART interruption / delay in  previous 12 months | 7 (1.3) | - | 7 (1.8) | 7 (2.6) | - | 0.673 |
| Delayed / interrupted ART prior to 12 months ago | 85 (17.5) | 9 (6.9) | 76 (19.4) | 52 (19.3) | 24 (19.7) | **0.024** |
| Delayed / interrupted ART prior to 12 months ago  for ≥1 week | 66 (12.6) | 6 (4.6) | 60 (15.3) | 42 (15.6) | 18 (14.8) | 0.678 |
| Doctor unaware of prior ART interruption / delay | 14 (2.7) | 2 (1.5) | 12 (3.1) | 7 (2.6) | 5 (4.1) | 0.733 |
| **ART necessity concerns** |  |  |  |  |  |  |
| Necessity concerns summary score – belief in necessity or acceptability of ARTg (sample mean, SD) | 62.0 (7.0) | 61.3 (7.4) | 62.2 (7.5) |  | 61.1 (7.6) | 0.841 |
| **Concomitant medications** |  |  |  |  |  |  |
| Medications per day (mean, SD) | 3.6 (4.3) | 0 (0.0) | 4.7 (4.4) | 2.7 (2.0) | 9.3 (4.9) | **<0.001** |
| Delayed / interrupted last 12 months | 60 (14.0) | 4 (3.1) | 56 (14.3) | 32 (11.9) | 24 (19.7) | **0.001** |
| Delayed / interrupted last 12 months for ≥1 week | 37 (7.1) | 3 (2.3) | 34 (8.7) | 17 (6.3) | 17 (13.9) | 0.422 |
| Doctor unaware of interruption / delay | 27 (5.2) | - | 27 (6.9) | 17 (6.3) | 10 (8.2) | 0.667 |
| Delayed / interrupted prior to 12 months ago | 49 (12.3) | 3 (2.3) | 46 (11.7) | 26 (9.6) | 20 (16.4) | **0.007** |
| Delayed / interrupted prior to 12 months ago for ≥1  week | 32 (6.1) | 1 (0.8) | 31 (7.9) | 16 (5.9) | 15 (12.3) | 0.205 |
| Doctor unaware of prior ART interruption / delay | 19 (3.6) | - | 19 (4.8) | 13 (4.8) | 6 (4.9) | 0.771 |
| **PRO-QOL HIV** |  |  |  |  |  |  |
| PRO-QOL HIV summary scoreh (mean, SD) | 40.1 (23.4) | 41.8 (21.4) | 41.7 (24.1) | 40.8 (24.1) | 49.8 (25.0) | **0.005** |

a p-value for trend: no co-medication(s), 1-4 co-medication(s), polypharmacy (≥5 co-medications)

b whereby medical costs - including pharmaceutical co-payments, are capped after reaching an annual threshold

c social services

d other diagnosed comorbidities include: depression (6 [1.1%]), erectile dysfunction (6 [1.1%]), osteoarthritis (5 [1.0%]) Chronic Obstructive Pulmonary Disease (COPD) (4 [0.8%]), and asthma (4 [0.8%])

e Anaemia defined by haemoglobin <130g/L in men and <120g/L in women

f ALT =alanine aminotransaminase

g eGFR = estimated glomerular filtration rate

g sample summary score (mean) (higher scores indicative of less belief in necessity or acceptability of ART)

h sample summary score (mean) (higher score indicative of lower quality of life)

**Supplementary Table 2 Antiretroviral regimens**

|  |  |
| --- | --- |
| **Antiretroviral regimen** | **n (%)** |
| NRTI with NNRTI | 211 (40.4%) |
| NRTI and INSTI | 99 (19.0%) |
| NRTI and PI | 79 (15.1%) |
| Alternate regimena | 133 (25.5%) |

Abbreviations

NRTI nucleoside reverse-transcriptase inhibitor

NNRTI non-nucleoside reverse transcriptase inhibitor

INSTI integrase strand transfer inhibitor

PI boosted protease inhibitor

a Alternate regimens were predominantly 3-class or NRTI-sparing

**Supplementary Table 3 Recreational drug use**

|  |  |
| --- | --- |
| Drug | **n (%) who used monthly or more** |
| marijuana | 94 (18.0%) |
| amyl-nitrate/poppers | 67 (12.8%) |
| benzodiazepines | 39 (7.5%) |
| ecstasy | 1 (0.2%) |
| injected speed or amphetamines | 20 (3.8%) |
| snorted/smoked speed/amphetamines | 17 (3.3%) |
| injected cocaine | 2 (0.4%) |
| snorted cocaine | 3 (0.6%) |
| crystal methamphetamines | 23 (4.4%) |
| GHB/GBH/liquid E/fantasy | 6 (1.1%) |
| LSD | 2 (0.4%) |
| PDE5 inhibitors | 67 (12.8%) |
| heroin | 3 (0.6%) |
| methadone | 9 (1.7%) |
| opiates | 11 (2.1%) |
| cigarettes | 143 (27.4) |
| alcohol dependence (CAGE [27]) | 106 (20.3) |

**Supplementary Table 4 Polypharmacy, PK/PD interactions / contraindications**

|  |  |  |
| --- | --- | --- |
| Polypharmacy, PK/PD interaction or contraindication | n | % |
| None | 242 | 46.4 |
| 1 | 165 | 31.6 |
| 2 | 81 | 15.5 |
| 3 | 32 | 6.1 |
| 4 | 2 | 0.4 |
| Total | 522 | 100 |

**Supplementary Table 5 Medication adherence**

|  |  |  |
| --- | --- | --- |
|  | **Yes**  **n (%)** | **No**  **n (%)** |
| **Antiretroviral Medications (n=522)** |  |  |
| Missed ≥3 doses in last 3 months | 78 (14.9) | 444 (85.1) |
| Delayed / interrupted for ≥1 week in last 12 months | 20 (3.8) | 502 (96.2) |
| Ever delayed / interrupted (more than 12 months ago)a | 85 (16.3) | 401 (76.8) |
| **Concomitant Medications (n=392)** |  |  |
| Delayed / interrupted in last 12 months | 60 (15.3b) | 332 (84.7b) |
| Delayed / interrupted for ≥1 week in last 12 months | 37 (9.4b) | 355 (90.6b) |

a 36 (6.9%) participant data missing / not applicable (e.g. not on ART prior to 12-months ago)

b percentage of total participants taking concomitant medication (n=392)