**Supplementary table 1.** Frequency of non-adherence behaviors by demographic and treatment-related variables

|  |  |  |
| --- | --- | --- |
| **Patient demographics** | **n (%)** | ***p*-value** |
| Age, quartiles (Q) | Q1 (n = 326) | 174 (53.4) | .424 |
| Q2 (n = 324) | 161 (49.7) |
| Q3 (n = 335) | 175 (52.2) |
| Q4 (n = 283) | 159 (56.2) |
| Sex | Women (n = 598) | 325 (54.3) | .323 |
| Men (n = 868) | 449 (51.7) |
| Educational level achieved | No studies (n = 95) | 64 (67.4) | .056 |
| Primary (n = 524) | 266 (50.8) |
| Secondary (n = 254) | 134 (52.8) |
| Vocational or technical (n = 263) | 144 (54.8) |
| University or further (n = 330) | 168 (50.9) |
| Working status | Student (n = 19) | 12 (63.2) | .299 |
| Actively working (n = 572) | 308 (53.8) |
| Unemployed (n = 138) | 79 (57.2) |
| Housekeeper (n = 112) | 54 (48.2) |
| Retired (n = 439) | 240 (54.7) |
| On sick leave (n = 54) | 24 (44.4) |
| **Treatment-related characteristics** | **n (%)** | ***p*-value** |
| Number of medicines taken daily | 0–2 medicines (n = 392) | 206 (52.6) | .229 |
| 3–4 medicines (n = 379) | 201 (53.0) |
| 5–6 medicines (n = 257) | 148 (57.6) |
| ≥7 medicines (n = 317) | 155 (48.9) |
| Number of doses per day needed | 1–2 doses (n = 857) | 430 (50.2) | .004 |
| 3–4 doses (n = 504) | 293 (58.1) |

**Supplementary table 2.** Distribution of frequencies of number of non-adherence behaviors by quartiles of IEXPAC experience score

|  |  |  |
| --- | --- | --- |
| **Number of non-adherence behaviors** | **IEXPAC experience score (Quartiles)** |  |
| **Q1 (n = 371)** | **Q2 (n = 407)** | **Q3 (n = 324)** | **Q4 (n = 338)** | **p-trend** |
| **0 (n = 717)** | 144 (38.8%) | 188 (46.2%) | 169 (52.2%) | 181 (53.6%) | < .001 |
| **1 (n =484)** | 137 (36.9%) | 130 (31.9%) | 98 (30.2%) | 96 (28.4%) |
| **2 (n =197)** | 50 (13.5%) | 49 (12.0%) | 43 (13.3%) | 47 (13.9%) |
| **3 or more (n = 112)** | 40 (10.8%) | 40 (9.8%) | 14 (4.3%) | 14 (4.1%) |

IEXPAC: Instrument to Evaluate the EXperience of PAtients with Chronic diseases

**Supplementary table 3.** Distribution of frequencies of number of non-adherence behaviors by quartiles of Beliefs About Medicines (BMQ) score

|  |  |  |
| --- | --- | --- |
| **Number of non-adherence behaviors** | **Beliefs About Medicines score (Quartiles)** |  |
| **Q1 (n = 371)** | **Q2 (n = 407)** | **Q3 (n = 324)** | **Q4 (n = 338)** | **p-trend** |
| **0 (n = 717)** | 102 (34.6%) | 131 (37.4%) | 209 (50.4%) | 249 (63.2%) | < .001 |
| **1 (n =484)** | 86 (29.2%) | 123 (35.1%) | 143 (34.5%) | 111 (28.2%) |
| **2 (n =197)** | 54 (18.3%) | 60 (17.1%) | 48 (11.6%) | 32 (8.1%) |
| **3 or more (n = 112)** | 53 (18.0%) | 36 (10.3%) | 15 (3.6%) | 2 (0.5%) |

**Supplementary table 4a.** Multivariate analyses of variables associated with the presence of ≥1 non-adherence behavior in patients with inflammatory bowel disease

|  |  |  |
| --- | --- | --- |
| **Variable** | **Model 1 (IEXPAC and BMQ overall scores)** | **Model 2 (IEXPAC and BMQ sub-scores)** |
| **OR (95% CI)** | ***p*-value** | **OR (95% CI)** | ***p*-value** |
| Age (1-year increment) | 0.98 (0.96–1.01) | .163 | 0.98 (0.96–1.01) | .220 |
| Gender (female versus male) | 0.65 (0.37–1.16) | .145 | 0.59 (0.32–1.07) | .083 |
| Needing to take medication 3-4 times per day (versus 1-2 times per day) | 1.75 (0.90–3.43) | .101 | 1.78 (0.87–3.61) | .114 |
| Number of different medicines (1-unit increment) | 0.94 (0.81–1.01) | .390 | 0.95 (0.81–1.11) | .522 |
| IEXPAC, overall score (1-unit increment) | 0.84 (0.72–0.98) | .025 | - | - |
| IEXPAC Factor 1: productive interactions score (1-unit increment) | - | - | 0.98 (0.80–1.20) | .846 |
| IEXPAC Factor 2: new relational model score (1-unit increment) | - | - | 1.02 (0.87–1.20) | .783 |
| IEXPAC Factor 3: self-management score (1-unit increment) | - | - | 0.83 (0.67–1.03) | .097 |
| BMQ, overall score (1-unit increment) | 0.93 (0.88–0.98) | .004 | - | - |
| BMQ Necessity score (1-unit increment) | - | - | 0.94 (0.87–1.02) | .148 |
| BMQ Concerns score (1-unit increment) | - | - | 1.11 (1.03–1.19) | .006 |

BMQ: Beliefs About Medicines; IEXPAC: Instrument to Evaluate the EXperience of PAtients with Chronic diseases; OR: odds ratio

**Supplementary table 4b.** Multivariate analyses of variables associated with the presence of ≥1 non-adherence behavior in patients with rheumatic diseases

|  |  |  |
| --- | --- | --- |
| **Variable** | **Model 1 (IEXPAC and BMQ overall scores)** | **Model 2 (IEXPAC and BMQ sub-scores)** |
| **OR (95% CI)** | ***p*-value** | **OR (95% CI)** | ***p*-value** |
| Age (1-year increment) | 1.00 (0.98–1.02) | .984 | 1.00 (0.98–1.03) | .703 |
| Gender (female versus male) | 1.04 (0.57–1.90) | .892 | 0.94 (0.50–1.74) | .837 |
| Needing to take medication 3-4 times per day (versus 1-2 times per day) | 1.40 (0.74–2.66) | .306 | 1.28 (0.64–2.56) | .482 |
| Number of different medicines (1-unit increment) | 1.00 (0.89–1.14) | .967 | 1.02 (0.90–1.16) | .733 |
| IEXPAC, overall score (1-unit increment) | 1.04 (0.90–1.20) | .581 | - | - |
| IEXPAC Factor 1: productive interactions score (1-unit increment) | - | - | 1.09 (0.92–1.30) | .329 |
| IEXPAC Factor 2: new relational model score (1-unit increment) | - | - | 1.04 (0.88–1.21) | .663 |
| IEXPAC Factor 3: self-management score (1-unit increment) | - | - | 0.91 (0.74–1.11) | .349 |
| BMQ, overall score (1-unit increment) | 0.95 (0.91–1.00) | .052 | - | - |
| BMQ Necessity score (1-unit increment) | - | - | 0.94 (0.87–1.02) | .145 |
| BMQ Concerns score (1-unit increment) | - | - | 1.03 (0.94–1.11) | .367 |

BMQ: Beliefs About Medicines; IEXPAC: Instrument to Evaluate the EXperience of PAtients with Chronic diseases; OR: odds ratio

**Supplementary table 4c.** Multivariate analyses of variables associated with the presence of ≥1 non-adherence behavior in patients with HIV infection

|  |  |  |
| --- | --- | --- |
| **Variable** | **Model 1 (IEXPAC and BMQ overall scores)** | **Model 2 (IEXPAC and BMQ sub-scores)** |
| **OR (95% CI)** | ***p*-value** | **OR (95% CI)** | ***p*-value** |
| Age (1-year increment) | 0.97 (0.95–0.99) | .020 | 0.98 (0.95–1.00) | .046 |
| Gender (female versus male) | 2.21 (1.28–3.84) | .005 | 2.31 (1.28–4.15) | .005 |
| Needing to take medication 3-4 times per day (versus 1-2 times per day) | 1.94 (0.93–4.02) | .078 | 1.82 (0.84–3.91) | .127 |
| Number of different medicines (1-unit increment) | 0.93 (0.84–1.04) | .199 | 0.93 (0.83–1.04) | .202 |
| IEXPAC, overall score (1-unit increment) | 1.06 (0.92–1.24) | .422 | - | - |
| IEXPAC Factor 1: productive interactions score (1-unit increment) | - | - | 1.02 (0.82–1.26) | .891 |
| IEXPAC Factor 2: new relational model score (1-unit increment) | - | - | 1.09 (0.97–1.22) | .133 |
| IEXPAC Factor 3: self-management score (1-unit increment) | - | - | 0.94 (0.75–1.17) | .563 |
| BMQ, overall score (1-unit increment) | 0.94 (0.90–0.98) | .003 | - | - |
| BMQ Necessity score (1-unit increment) | - | - | 0.95 (0.88–1.01) | .098 |
| BMQ Concerns score (1-unit increment) | - | - | 1.07 (1.01–1.13) | .018 |

BMQ: Beliefs About Medicines; IEXPAC: Instrument to Evaluate the EXperience of PAtients with Chronic diseases; OR: odds ratio

**Supplementary table 4d.** Multivariate analyses of variables associated with the presence of ≥1 non-adherence behavior in patients with diabetes mellitus

|  |  |  |
| --- | --- | --- |
| **Variable** | **Model 1 (IEXPAC and BMQ overall scores)** | **Model 2 (IEXPAC and BMQ sub-scores)** |
| **OR (95% CI)** | ***p*-value** | **OR (95% CI)** | ***p*-value** |
| Age (1-year increment) | 1.02 (0.99–1.04) | .226 | 1.02 (0.99–1.05) | .199 |
| Gender (female versus male) | 0.85 (0.46–1.45) | .549 | 1.07 (0.60–1.91) | .812 |
| Needing to take medication 3-4 times per day (versus 1-2 times per day) | 0.97 (0.55–1.73) | .921 | 0.94 (0.50–1.74) | .842 |
| Number of different medicines (1-unit increment) | 0.97 (0.90–1.06) | .529 | 0.98 (0.89–1.07) | .594 |
| IEXPAC, overall score (1-unit increment) | 0.97 (0.84–1.12) | .674 | - | - |
| IEXPAC Factor 1: productive interactions score (1-unit increment) | - | - | 1.20 (0.99–1.46) | .065 |
| IEXPAC Factor 2: new relational model score (1-unit increment) | - | - | 1.15 (0.98–1.34) | .078 |
| IEXPAC Factor 3: self-management score (1-unit increment) | - | - | 0.80 (0.65–0.98) | .028 |
| BMQ, overall score (1-unit increment) | 0.88 (0.84–0.93) | <.001 | - | - |
| BMQ Necessity score (1-unit increment) | - | - | 0.87 (0.80–0.95) | .001 |
| BMQ Concerns score (1-unit increment) | - | - | 1.16 (1.04–1.19) | .001 |

BMQ: Beliefs About Medicines; IEXPAC: Instrument to Evaluate the EXperience of PAtients with Chronic diseases; OR: odds ratio