Determinants of self-reported functional status (EPIC-26) in prostate cancer patients prior to treatment

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Online Resource 3: Results of linear multilevel analyses for pretherapeutic self-reported functional status (model 2)

|  | Urinary incontinence (2699 patients, 43 centers) | | Urinary irritative/obstructive (2632 patients, 43 centers) | | Bowel (2636 patients, 43 centers) | Sexual (2749 patients, 43 centers) | Hormonal (2698 patients, 43 centers) |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Estimate (95% CI); p-value | | Estimate (95% CI); p-value | | Estimate (95% CI); p-value | Estimate (95% CI); p-value | Estimate (95% CI); p-value |
| (Intercept) | 103.6 (98.41-108.78) | | 94.67 (88.93-100.42) | | 96.9 (93.49-100.32) | 148.6 (139.08-158.12) | 75.12 (70.02-80.22) |
| **Patient characteristics** | |  | |
| *Sociodemographic information* | |  | |
| Age | **-0.19 (-0.26--0.11);**  **<0.001\*** | | **-0.13 (-0.21--0.04);**  **0.003\*** | | 0 (-0.05-0.05);  0.892 | **-1.39 (-1.53--1.25);**  **<0.001\*** | **0.24 (0.17-0.32);**  **<0.001\*** |
| Nationality |  | |  | |  |  |  |
| German | Reference | | Reference | | Reference | Reference | Reference |
| Other | -2.35 (-5.44-0.75);  0.138 | | -2.94 (-6.36-0.47);  0.091 | | 0.04 (-1.99-2.07);  0.970 | 0.5 (-5.24-6.25);  0.864 | 0.58 (-2.43-3.59);  0.704 |
| Insurance |  | |  | |  |  |  |
| Statutory | Reference | | Reference | | Reference | Reference | Reference |
| Private | 1.11 (-0.32-2.53);  0.128 | | 1.34 (-0.24-2.92);  0.096 | | 0.69 (-0.25-1.63);  0.151 | 2.46 (-0.16-5.08);  0.065 | 1.26 (-0.14-2.66);  0.077 |
| School-leaving qualification |  | |  | |  |  |  |
| Lower secondary school | Reference | | Reference | | Reference | Reference | Reference |
| Intermediate secondary school | 1.35 (-0.11-2.81);  0.070 | | 0.55 (-1.07-2.18);  0.504 | | 0.34 (-0.64-1.31);  0.499 | **3.23 (0.57-5.89);**  **0.017\*** | **2.06 (0.62-3.5);**  **0.005\*** |
| FHSRa | 1.05 (-0.78-2.89);  0.261 | | -0.36 (-2.39-1.67);  0.727 | | -0.76 (-2-0.47);  0.224 | **6.37 (3-9.75);**  **<0.001\*** | 0.01 (-1.81-1.84);  0.988 |
| University entrance certificate | 0.72 (-0.89-2.33);  0.378 | | 0.03 (-1.76-1.81);  0.977 | | 0.21 (-0.86-1.28);  0.699 | **8.23 (5.27-11.19);**  **<0.001\*** | **2.06 (0.48-3.64);**  **0.011\*** |
| Other | 0.81 (-3.69-5.31);  0.725 | | -2.29 (-7.26-2.69);  0.367 | | 0.97 (-1.94-3.88);  0.514 | -0.53 (-8.76-7.7);  0.900 | 1.83 (-2.57-6.23);  0.415 |
| None | -0.58 (-7.4-6.23);  0.867 | | **-10.67 (-18.12--3.22);**  **0.005\*** | | -4.58 (-8.87--0.29);  0.036\* | -8.06 (-20.11-3.98);  0.189 | 0.90 (-5.69-7.5);  0.788 |
| *Disease information* | |  | |
| Comorbidities |  | |  | |  |  |  |
| 0 | Reference | | Reference | | Reference | Reference | Reference |
| 1 | 0.34 (-1.1-1.77);  0.645 | | 0.61 (-1-2.23);  0.458 | | -0.25 (-1.18-0.69);  0.602 | **-4.84 (-7.48--2.21);**  **<0.001\*** | **-2.1 (-3.5--0.7);**  **0.003\*** |
| ≥ 2 | 1.3 (-0.91-3.52);  0.249 | | -1.53 (-4.01-0.95);  0.226 | | **-1.44 (-2.88-0.01);**  **0.052\*** | **-8.5 (-12.59--4.4);**  **<0.001\*** | **-4.26 (-6.43--2.09);**  **<0.001\*** |
| Risk classb |  | |  | |  |  |  |
| High, localized | -0.62 (-2.32-1.07);  0.469 | | **-2.13 (-4.01--0.26);**  **0.026\*** | | **-1.4 (-2.53--0.27);**  **0.016\*** | -0.94 (-4.05-2.17);  0.553 | **-1.87 (-3.54--0.19);**  **0.029\*** |
| Intermediate, localized | 0.44 (-1.15-2.04);  0.587 | | -0.12 (-1.9-1.66);  0.895 | | -0.82 (-1.89-0.25);  0.133 | 1.97 (-0.97-4.91);  0.188 | -0.31 (-1.9-1.27);  0.700 |
| Low, localized | Reference | | Reference | | Reference | Reference | Reference |
| Locally advanced | 1.29 (-1.62-4.21);  0.384 | | **-3.46 (-6.67--0.24);**  **0.035\*** | | -1.28 (-3.2-0.64);  0.192 | -1.13 (-6.41-4.14);  0.673 | -1.32 (-4.21-1.58);  0.374 |
| Advanced (N1) | -2.18 (-7.53-3.17);  0.424 | | **-13.55 (-19.5--7.6);**  **<0.001\*** | | **-5.35 (-8.95--1.76);**  **0.003\*** | -8.27 (-18.19-1.65);  0.102 | -1.38 (-6.52-3.76);  0.599 |
|  | |  | |
| ICC (model 1) | 0.007;  0.180 | | 0.007;  0.185 | | <0.001;  0.773 | 0.007;  0.163 | 0.007;  0.187 |
| ICC (model 2) | 0.003;  0.336 | | 0.007;  0.198 | | <0.001;  0.964 | 0.002;  0.412 | 0.001;  0.531 |

Note: (1) Multilevel model 2 accounts for the clustering of patients (level 1) in Prostate Cancer Centers (level 2) with a random intercept. Fixed effects for sociodemographic predictors, information on disease and treatment allocation are included. (2) Patient numbers vary between analyses of different scores due to the different number of missing values for the respective scores. (3) Results regarding the missing categories for categorical variables are not presented in this table.

a FHSR: entrance certificate for a higher technical college/university of applied science

b Risk class according to d’Amico (D'Amico et al., 1998)

\*P < 0.05