Table S1: Odds ratios of undergoing non-malignant emergency laparotomy by income, educational level and occupational status, Denmark, 2003-2014. Patients with secondary diagnosis of cancer are excluded.

|  |  |
| --- | --- |
|  | **Non-malignant emergency laparotomies** |
|  | na | OR[95% CI]b | OR[95% CI]c |
| **Household disposable income** |
| Q1 (lowest) | 2871/2700 | 1.54 [1.42;1.68] | 1.25 [1.15;1.37] |
| Q2 | 3069/2651 | 1.62 [1.49;1.75] | 1.32 [1.22;1.44] |
| Q3 | 2696/2704 | 1.32 [1.22;1.43] | 1.20 [1.11;1.31] |
| Q4 (highest) | 2089/2685 | 1.00\*\*\* | 1.00\*\*\* |
| **Educational attainment** |  |
| Elementary school | 4586/4003 | 1.39 [1.26;1.53] | 1.20 [1.09;1.33] |
| Vocational education | 3292/3359 | 1.16 [1.05;1.27] | 1.07 [0.97;1.18] |
| High school | 321/343 | 1.10 [0.92;1.31] | 1.03 [0.86;1.24] |
| Short tertiary education | 224/318 | 0.83 [0.69;1.01] | 0.82 [0.67;0.99] |
| Medium tertiary education | 1021/1205 | 1.00\*\*\* | 1.00\*\*\* |
| Long tertiary education | 339/474 | 0.85 [0.72;1.00] | 0.88 [0.74;1.04] |
| Missing | 957/1038 | 1.29 [1.11;1.49] | 1.11 [0.96;1.29] |
| **Occupational status** |  |
| Early retirement pension | 1109/448 | 3.83 [3.34;4.40] | 2.65 [2.30;3.06] |
| Retired | 6116/6222 | 1.55 [1.34;1.78] | 1.31 [1.13;1.51] |
| Without work | 583/479 | 1.83 [1.58;2.12] | 1.57 [1.35;1.82] |
| Working lower skill level | 1847/2025 | 1.30 [1.18;1.44] | 1.24 [1.12;1.38] |
| Working higher skill level | 1085/1566 | 1.00\*\*\* | 1.00\*\*\* |

 ancases/nreferences; bAdjusted by age, sex, and country of origin; cAdjusted by age, sex, country of origin, comorbidity, and marital status.\*\*\*p < 0.001; \*\*p < 0.01; \*p < 0.05

Table S2: Hazard ratios of 1-year postoperative mortality among patients undergoing non-malignant emergency laparotomy by income, educational level and occupational status, Denmark, 2003-2014. Patients with secondary diagnosis of cancer are excluded.

|  |  |
| --- | --- |
|  | **Non-malignant emergency laparotomies** |
|  | Deaths | HR[95% CI]a | HR[95% CI]b |
| **Household disposable income** |
| Q1 (lowest) | 1046 | 1.93[1.68;2.22] | 1.83[1.59;2.11] |
| Q2 | 1006 | 1.83[1.60;2.10] | 1.75[1.52;2.01] |
| Q3 | 597 | 1.55[1.34;1.79] | 1.50[1.30;1.73] |
| Q4 (highest) | 275 | 1.00\*\*\* | 1.00\*\*\* |
| **Educational attainment** |
| Elementary school | 1406 | 1.68[1.43;1.98] | 1.67[1.42;1.97] |
| Vocational education | 740 | 1.40[1.18;1.66] | 1.41[1.19;1.67] |
| High school | 39 | 1.45[1.02;2.06] | 1.42[1.00;2.01] |
| Short tertiary education | 33 | 1.19[0.82;1.73] | 1.21[0.83;1.75] |
| Medium tertiary education | 167 | 1.00\*\*\* | 1.00\*\*\* |
| Long tertiary education | 58 | 1.00[0.74;1.34] | 1.01[0.75;1.37] |
| Missing | 482 | 1.84[1.51;2.24] | 1.78[1.46;2.17] |
| **Occupational status** |
| Early retirement pension | 278 | 4.77[3.60;6.33] | 4.17[3.14;5.55] |
| Retired | 2409 | 2.44[1.82;3.27] | 2.30[1.72;3.08] |
| Without work | 64 | 2.80[1.96;4.00] | 2.63[1.84;3.76] |
| Working lower skill level | 114 | 1.45[1.06;1.98] | 1.43[1.05;1.96] |
| Working higher skill level | 60 | 1.00\*\*\* | 1.00\*\*\* |

aAdjusted by age, sex, and country of origin; bAdjusted by age, sex, country of origin, comorbidity, and marital status.

\*\*\*p < 0.001; \*\*p < 0.01; \*p < 0.05

Table S3: Odds ratios of undergoing non-malignant emergency laparotomy by income and educational level, Denmark, 2003-2014. Income and educational attainment included simultaneously.

|  |  |
| --- | --- |
|  | **Non-malignant emergency laparotomies** |
|  | na | OR[95% CI]b | OR[95% CI]c |
| **Household disposable income** |
| Q1 (lowest) | 3186/2991 | 1.39 [1.28;1.52] | 1.17 [1.07;1.28] |
| Q2 | 3383/2990 | 1.44 [1.33;1.56] | 1.21 [1.11;1.32] |
| Q3 | 3003/2990 | 1.25 [1.15;1.35] | 1.15 [1.06;1.25] |
| Q4 (highest) | 2375/2991 | 1.00\*\*\* | 1.00\*\*\* |
| **Educational attainment** |  |
| Elementary school | 5062/4485 | 1.17 [1.07;1.29] | 1.10 [1.00;1.22] |
| Vocational education | 3742/3759 | 1.06 [0.97;1.16] | 1.02 [0.93;1.12] |
| High school | 328/371 | 0.94 [0.79;1.12] | 0.94 [0.79;1.13] |
| Short tertiary education | 252/346 | 0.81 [0.68;0.97] | 0.82 [0.68;0.98] |
| Medium tertiary education | 1156/1333 | 1.00\*\*\* | 1.00\*\* |
| Long tertiary education | 388/541 | 0.89 [0.76;1.04] | 0.90 [0.77;1.06] |
| Missing | 1034/1127 | 1.10 [0.96;1.27] | 1.03 [0.89;1.20] |

ancases/nreferences; bAdjusted by age, sex, and country of origin; cAdjusted by age, sex, country of origin, comorbidity, and marital status.

\*\*\*p < 0.001; \*\*p < 0.01; \*p < 0.05

Table S4: Hazard ratios of 1-year postoperative mortality among patients undergoing non-malignant emergency laparotomy by income and educational level, Denmark, 2003-2014. Income and educational attainment included simultaneously.

|  |  |
| --- | --- |
|  | **Non-malignant emergency laparotomies** |
|  | Deaths | HR [95% CI]a | HR [95% CI]b |
| **Household disposable income** |
| Q1 (lowest) | 1273 | 1.46 [1.30;1.65] | 1.40 [1.24;1.58] |
| Q2 | 1225 | 1.40 [1.24;1.58] | 1.34 [1.19;1.51] |
| Q3 | 780 | 1.24 [1.10;1.40] | 1.21 [1.07;1.36] |
| Q4 (highest) | 454 | 1.00\*\*\* | 1.00\*\*\* |
| **Educational attainment** |
| Elementary school | 1743 | 1.23 [1.07;1.41] | 1.24 [1.08;1.43] |
| Vocational education | 1005 | 1.10 [0.96;1.26] | 1.11 [0.97;1.28] |
| High school | 43 | 1.02 [0.74;1.42] | 1.05 [0.76;1.45] |
| Short tertiary education | 48 | 1.02 [0.75;1.39] | 1.03 [0.76;1.41] |
| Medium tertiary education | 259 | 1.00\*\* | 1.00\*\* |
| Long tertiary education | 90 | 1.07 [0.84;1.36] | 1.09 [0.85;1.39] |
| Missing | 545 | 1.35[1.13;1.60] | 1.34 [1.13;1.59] |

aAdjusted by age, sex, and country of origin; bAdjusted by age, sex, country of origin, comorbidity, and marital status.

\*\*\*p < 0.001; \*\*p < 0.01; \*p < 0.05