Supplementary figure 1



Supplementary figure 1. Map over the Faroe Islands.

Supplementary figure 2

Supplementary figure 2. Trend in annual age-standardized incidence of dementia by sex. Female estimates are standardized to male population weight and estimates are otherwise age-standardized using the 2010 Faroese population as standard.

Supplementary figure 3

Supplementary figure 3. Trend in annual age-standardized prevalence of dementia by sex. Female estimates are standardized to male population weight and estimates are otherwise age-standardized using the 2010 Faroese population as standard.

Supplementary table 1. Demographic characteristics of subjects aged ≥60 year that obtained a dementia diagnosis between 1st, 2010 and Dec 31st, 2017 in the Faroe Islands

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Characteristics | All | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | p- trend |
| Appointments | n=668 | n=66 | n=62 | n=71 | n=62 | n=67 | n=77 | n=62 | n=90 |  |
| Incident cases | n=442 | n=55 | n=50 | n=62 | n=51 | n=54 | n=53 | n=49 | n=68 |  |
| Age at diagnosis, mean (SD) | 78.0 (7.7) | 79.4 (6.3) | 79.5 (7.7) | 77.8 (6.5) | 79.1 (7.1) | 79.8 (5.9) | 79.6 (6.5) | 77.9 (6.1) | 80.5 (6.2) | 0.3† |
| Age distribution at diagnosis, n (%) |  |  |  |  |  |  |  |  |  | 0.8\* |
| 60-64 | 10 (2.2) | 1 (1.8) | 2 (4.0) | 2 (3.1) | 1 (1.9) | 1 (1.8) | 1 (1.8) | 1 (1.9) | 1 (1.4) |  |
| 65-69 | 32 (7.0) | 3 (5.4) | 5 (10.0) | 6 (9.2) | 5 (9.6) | 3 (5.5) | 2 (3.5) | 5 (9.6) | 3 (4.2) |  |
| 70-74 | 68 (14.8) | 8 (14.3) | 3 (6.0) | 14 (21.5) | 6 (11.5) | 8 (14.5) | 11 (19.3) | 8 (15.4) | 10 (14.1) |  |
| 75-79 | 112 (24.5) | 18 (32.1) | 9 (18.0) | 15 (32.1) | 14 (26.9) | 14 (25.5) | 12 (21.1) | 14 (26.9) | 16 (22.5) |  |
| 80-84 | 144 (31.4) | 16 (28.6) | 22 (44.0) | 19 (29.2) | 18 (34.6) | 15 (27.3) | 17 (29.8) | 17 (32.7) | 20 (28.2) |  |
| 85+ | 76 (16.6) | 9 (16.1) | 9 (18.0) | 6 (6.9) | 7 (13.5) | 13 (23.6) | 10 (17.5) | 4 (7.7) | 18 (25.4) |  |
|  |  |  |  |  |  |  |  |  |  |  |
| MMSE at first clinical visit, mean (SD), range‡ | 20.5 (5.7) | 20.1 (5.9) | 19.6 (6.5) | 20.4 (5.5) | 19.7 (5.1) | 20.8 (5.8) | 21.8 (6.0) | 21.9 (5.3) | 19.8 (5.2) | 0.3† |
| GDS at first clinical visit, mean (SD), range§ | 2.9 (2.6) | 2.2 (2.4) | 3.1 (2.3) | 2.8 (2.5) | 3.1 (3.3) | 3.4 (2.9) | 2.4 (1.9) | 2.5 (2.0) | 3.0 (2.7) | 0.3† |
| CT performed, n (%)¶ | 416 (96.9) | 46 (93.9) | 44 (93.6) | 59 (95.2) | 49 (96.1) | 52 (96.3) | 50 (92.6) | 48 (100.0) | 68 (100.0) | 0.1\* |
| Self-informed family history of dementia, n (%)# | 160 (34.9) | 18 (32.7) | 20 (40.0) | 22 (35.5) | 16 (31.4) | 17 (31.5) | 23 (42.6 | 13 (27.1) | 23 (33.8) | 0.2\* |
| Medication use before diagnosis |  |  |  |  |  |  |  |  |  |  |
| Depression | 155 (34.9) | 24 (43.6) | 22 (44.0) | 21 (33.9) | 15 (29.4) | 18 (33.3) | 18 (33.3) | 13 (27.1) | 23 (42.6) | 0.4\* |
| Hypertension | 279 (60.9) | 35 (63.6) | 36 (72.0) | 42 (67.7) | 35 (68.6) | 32 (59.3) | 30 (55.6) | 23 (47.9) | 44 (64.7) | 0.2\* |
| Diabetes mellitus | 59 (12.9) | 6 (10.9) | 4 (8.0) | 7 (11.3) | 9 (17.6) | 10 (18.5) | 10 (18.5) | 3 (6.3) | 10 (14.7) | 0.4\* |
| Hypercholesterolemia | 148 (32.3) | 15 (27.3) | 14 (28.0) | 14 (22.6) | 12 (23.5) | 21 (38.9) | 26 (48.1) | 23 (47.9) | 24 (35.3) | 0.01\* |
| Anti-dementia medication prescribed after establishment of diagnosis, n (%) | 361 (78.8) | 42 (76.4) | 39 (78.0) | 51 (82.3) | 37 (72.5) | 40 (74.1) | 43 (81.1) | 40 (83.3) | 56 (82.4) | 0.8\* |
| Living condition at first clinical visit, n (%) |  |  |  |  |  |  |  |  |  | 0.5\* |
| Alone | 137 (30.0) | 17 (32.1) | 17 (34.0) | 14 (22.6) | 14 (27.5) | 14 (26.0) | 14 (26.0) | 16 (33.3) | 26 (38.2) |  |
| With someone | 258 (56.6) | 32 (60.4) | 27 (54.0) | 38 (61.3) | 30 (58.8) | 31 (57.4) | 30 (55.6) | 30 (62.5) | 31 (45.6) |  |
| Institution | 61 (13.3) | 4 (7.53) | 6 (12.0) | 10 (16.1) | 7 (13.7) | 9 (16.7) | 10 (18.5) | 2  (4.2) | 11 (16.2) |  |
| Type of dementia diagnosis, n(%) |  |  |  |  |  |  |  |  |  |  |
| Early onset Alzheimer's | 21 (4.6) | 2 (3.6) | 2 (4.0) | 2 (3.2) | 1 (2.0) | 0 | 1 (1.9) | 1 (2.1) | 1 (1.5) |  |
| Late onset Alzheimer's | 312 (68.1) | 40 (72.7) | 36 (72.0) | 45 (72.6) | 35 (68.6) | 33 (61.1) | 41 (76.0) | 32 (66.7) | 49 (72.1) |  |
| Mixed dementia | 27 (5.9) | 2 (3.6) | 3 (6.0) | 2 (3.2) | 4 (7.8) | 8 (14.8) | 0 | 5 (10.4) | 3 (4.4) |  |
| Vascular dementia | 34 (7.4) | 4  (7.3) | 3  (6.0) | 5  (8.1) | 6 (11.8) | 8 (14.8) | 4  (7.4) | 2  (4.1) | 1  (1.5) |  |
| Lewy body dementia | 18 (3.9) | 1 (1.8) | 0 | 4 (6.5) | 1 (2.0) | 1 (1.9) | 3 (5.6) | 3 (6.3) | 5 (7.3) |  |
| Frontotemporal dementia | 12 (2.6) | 0 | 4 (8.0) | 0 | 1 (2.0) | 1 (1.9) | 2 (3.7) | 2 (4.2) | 1 (1.5) |  |
| Dementia associated with Parkinson’s Disease | 5 (1.1) | 1 (1.8) | 0 | 1 (1.6) | 1 (2.0) | 0 | 0 | 1 (2.1) | 1 (1.5) |  |
| Alcohol-induced dementia | 6 (1.3) | 1 (1.8) | 0 | 1 (1.6) | 0 | 0 | 0 | 2 (4.2) | 2 (2.9) |  |
| Non-specified dementia | 23 (5.0) | 4 (7.3) | 2 (4.0) | 2 (3.2) | 2 (3.9) | 3 (5.6) | 3 (5.6) | 1 (2.1) | 5 (7.4) |  |

\*chi square test; †ANOVA. ‡data missing for n=64, §data missing for n=88; ¶data missing for n=26; #data missing for n=273.

SD=standard deviation; MMSE= Mini-Mental State Examination; GDS: Geriatric depression scale; CT= computed tomography

Supplementary table 2. Twelve-month age-specific incidence and prevalence (per 1000) of dementia among subjects aged ≥60 year in Faroe Islands from 2010 to 2017

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Age group | Incidence cases | Crude Incidence | Sex standardized incidencea | Prevalence cases | Crude prevalence | Sex standardized prevalencea |
| 2010 | 60-64 | 1 | 0.36 | 0.34 | 6 | 2.14 | 2.19 |
|  | 65-69 | 3 | 1.31 | 1.29 | 11 | 4.81 | 4.86 |
|  | 70-74 | 8 | 4.90 | 4.91 | 34 | 20.81 | 20.82 |
|  | 75-79 | 18 | 13.38 | 13.49 | 42 | 31.23 | 31.30 |
|  | 80-84 | 16 | 15.50 | 14.54 | 39 | 37.79 | 36.74 |
|  | 85+ | 9 | 9.26 | 9.34 | 15 | 15.43 | 15.56 |
|  | All ages (60+) | 55 | 5.46 | 5.37 | 147 | 14.59 | 14.53 |
| 2011 | 60-64 | 2 | 0.71 | 0.72 | 8 | 2.85 | 2.90 |
|  | 65-69 | 5 | 2.18 | 2.23 | 16 | 6.99 | 7.09 |
|  | 70-74 | 3 | 1.84 | 1.84 | 36 | 22.03 | 22.05 |
|  | 75-79 | 9 | 6.69 | 6.60 | 44 | 32.71 | 32.65 |
|  | 80-84 | 22 | 21.32 | 19.39 | 56 | 54.26 | 50.89 |
|  | 85+ | 9 | 9.26 | 9.34 | 19 | 19.55 | 19.43 |
|  | All ages (60+) | 50 | 4.96 | 4.77 | 179 | 17.77 | 17.44 |
| 2012 | 60-64 | 2 | 0.71 | 0.76 | 8 | 2.85 | 2.98 |
|  | 65-69 | 6 | 2.62 | 2.63 | 22 | 9.61 | 9.72 |
|  | 70-74 | 14 | 8.57 | 8.63 | 47 | 28.76 | 28.84 |
|  | 75-79 | 15 | 11.15 | 11.14 | 51 | 37.92 | 37.83 |
|  | 80-84 | 19 | 18.41 | 19.36 | 69 | 66.86 | 64.20 |
|  | 85+ | 6 | 6.17 | 7.06 | 22 | 22.63 | 23.38 |
|  | All ages (60+) | 62 | 6.15 | 6.36 | 219 | 21.74 | 21.60 |
| 2013 | 60-64 | 1 | 0.36 | 0.38 | 7 | 2.50 | 2.61 |
|  | 65-69 | 5 | 2.18 | 2.16 | 27 | 11.80 | 11.89 |
|  | 70-74 | 6 | 3.67 | 3.67 | 47 | 28.76 | 28.88 |
|  | 75-79 | 14 | 10.41 | 10.58 | 57 | 42.38 | 42.37 |
|  | 80-84 | 18 | 17.44 | 16.96 | 84 | 81.40 | 77.93 |
|  | 85+ | 7 | 7.20 | 5.32 | 26 | 26.75 | 25.58 |
|  | All ages (60+) | 51 | 5.06 | 4.85 | 248 | 24.62 | 24.22 |
| 2014 | 60-64 | 1 | 0.36 | 0.34 | 7 | 2.50 | 2.57 |
|  | 65-69 | 3 | 1.31 | 1.22 | 29 | 12.67 | 12.70 |
|  | 70-74 | 8 | 4.90 | 4.91 | 49 | 29.99 | 30.13 |
|  | 75-79 | 14 | 10.41 | 10.43 | 66 | 49.07 | 48.97 |
|  | 80-84 | 15 | 14.53 | 13.73 | 86 | 83.33 | 79.15 |
|  | 85+ | 13 | 13.37 | 13.21 | 35 | 36.01 | 34.09 |
|  | All ages (60+) | 54 | 5.36 | 5.24 | 272 | 27.00 | 26.42 |
| 2015 | 60-64 | 1 | 0.36 | 0.38 | 8 | 2.85 | 2.94 |
|  | 65-69 | 2 | 0.87 | 0.88 | 28 | 12.23 | 12.29 |
|  | 70-74 | 11 | 6.73 | 6.74 | 57 | 34.88 | 35.01 |
|  | 75-79 | 12 | 8.92 | 8.80 | 66 | 49.07 | 48.97 |
|  | 80-84 | 17 | 16.47 | 16.54 | 90 | 87.21 | 83.58 |
|  | 85+ | 11 | 11.32 | 10.86 | 36 | 37.04 | 34.85 |
|  | All ages (60+) | 54 | 5.36 | 5.31 | 285 | 28.29 | 27.75 |
| 2016 | 60-64 | 1 | 0.36 | 0.34 | 9 | 3.21 | 3.28 |
|  | 65-69 | 2 | 0.87 | 1.82 | 32 | 13.98 | 14.18 |
|  | 70-74 | 8 | 4.90 | 4.90 | 57 | 34.88 | 35.01 |
|  | 75-79 | 14 | 10.41 | 10.43 | 70 | 52.04 | 51.73 |
|  | 80-84 | 17 | 16.47 | 16.54 | 91 | 88.18 | 85.98 |
|  | 85+ | 4 | 4.12 | 3.87 | 33 | 33.95 | 30.90 |
|  | All ages (60+) | 46 | 4.57 | 4.76 | 292 | 28.98 | 28.51 |
| 2017 | 60-64 | 1 | 0.36 | 0.38 | 10 | 3.57 | 3.66 |
|  | 65-69 | 3 | 1.31 | 1.35 | 31 | 13.54 | 13.64 |
|  | 70-74 | 10 | 6.12 | 6.08 | 61 | 37.33 | 37.41 |
|  | 75-79 | 16 | 11.90 | 11.78 | 79 | 58.74 | 58.33 |
|  | 80-84 | 20 | 19.38 | 19.37 | 94 | 91.09 | 87.61 |
|  | 85+ | 18 | 18.52 | 17.84 | 42 | 43.21 | 39.41 |
|  | All ages (60+) | 68 | 6.75 | 6.68 | 317 | 31.46 | 30.75 |

aDirect standardization for sex using the 2010 Faroese populations structure as standard population: age 60-64: n=2803; age 65-69: n=2289; age 70-74: n=1634; age 75-79: n=1345; age 80-84: n=1032; ≥85+: n=972. All ages (60+): n=10075. Total population: n=48447.

2010 Faroese female/male ratio: age 60-64: 0.89; age 65-69: 0.87; age 70-74: 0.98; age 75-79: 1.10; age 80-84: 1.49; ≥85+: 2.10. All ages (60+): 1.06

Supplementary table 3. Twelve-month age- and sex specific incidence and prevalence (per 1000) of dementia among subjects aged ≥60 year in Faroe Islands from 2010 to 2017

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Femalesa** |  |  |  | **Malesa** |  |  |
| Year | Age group | Incidence cases | Crude Incidence | Prevalence cases | Crude prevalence | Incidence cases | Crude Incidence | Prevalence cases | Crude prevalence |
| 2010 | 60-64 | 0 | 0.00 | 4 | 3.02 | 1 | 0.68 | 2 | 1.35 |
|  | 65-69 | 1 | 0.94 | 6 | 5.64 | 2 | 1.63 | 5 | 4.08 |
|  | 70-74 | 5 | 6.18 | 18 | 22.25 | 3 | 3.64 | 16 | 19.39 |
|  | 75-79 | 8 | 11.35 | 21 | 29.79 | 10 | 15.63 | 21 | 32.81 |
|  | 80-84 | 12 | 19.42 | 26 | 42.07 | 4 | 9.66 | 13 | 31.40 |
|  | 85+ | 6 | 9.12 | 10 | 15.20 | 3 | 9.55 | 5 | 15.92 |
|  | All ages (60+) | 32 | 6.18 | 85 | 16.42 | 23 | 4.69 | 62 | 12.66 |
| 2011 | 60-64 | 1 | 0.76 | 5 | 3.78 | 1 | 0.68 | 3 | 2.03 |
|  | 65-69 | 3 | 2.82 | 9 | 8.47 | 2 | 1.63 | 7 | 5.71 |
|  | 70-74 | 2 | 2.47 | 19 | 23.49 | 1 | 1.21 | 17 | 20.61 |
|  | 75-79 | 6 | 8.51 | 24 | 34.04 | 3 | 4.69 | 20 | 31.25 |
|  | 80-84 | 18 | 29.13 | 42 | 67.96 | 4 | 9.66 | 14 | 33.82 |
|  | 85+ | 6 | 9.12 | 13 | 19.76 | 3 | 9.55 | 6 | 19.11 |
|  | All ages (60+) | 36 | 6.96 | 112 | 21.64 | 14 | 2.86 | 67 | 13.68 |
| 2012 | 60-64 | 2 | 1.51 | 7 | 5.29 | 0 | 0.00 | 1 | 0.68 |
|  | 65-69 | 3 | 2.82 | 12 | 11.29 | 3 | 2.45 | 10 | 8.16 |
|  | 70-74 | 12 | 14.83 | 30 | 37.08 | 2 | 2.42 | 17 | 20.61 |
|  | 75-79 | 8 | 11.35 | 28 | 39.72 | 7 | 10.94 | 23 | 35.94 |
|  | 80-84 | 9 | 14.56 | 48 | 77.67 | 10 | 24.15 | 21 | 50.72 |
|  | 85+ | 3 | 4.56 | 14 | 21.28 | 3 | 9.55 | 8 | 25.48 |
|  | All ages (60+) | 37 | 7.15 | 139 | 26.85 | 25 | 5.10 | 80 | 16.33 |
| 2013 | 60-64 | 1 | 0.76 | 6 | 4.54 | 0 | 0.00 | 1 | 0.68 |
|  | 65-69 | 2 | 1.88 | 14 | 13.17 | 3 | 2.45 | 13 | 10.60 |
|  | 70-74 | 3 | 3.71 | 33 | 40.79 | 3 | 3.64 | 14 | 16.97 |
|  | 75-79 | 5 | 7.09 | 30 | 42.55 | 9 | 14.06 | 27 | 42.19 |
|  | 80-84 | 12 | 19.42 | 59 | 95.47 | 6 | 14.49 | 25 | 60.39 |
|  | 85+ | 7 | 10.64 | 19 | 28.88 | 0 | 0.00 | 7 | 22.29 |
|  | All ages (60+) | 30 | 5.80 | 161 | 31.11 | 21 | 4.29 | 87 | 17.76 |
| 2014 | 60-64 | 0 | 0.00 | 5 | 3.78 | 1 | 0.68 | 2 | 1.35 |
|  | 65-69 | 0 | 0.00 | 14 | 13.17 | 3 | 2.45 | 15 | 12.23 |
|  | 70-74 | 5 | 6.18 | 36 | 44.50 | 3 | 3.64 | 13 | 15.76 |
|  | 75-79 | 7 | 9.93 | 36 | 51.06 | 7 | 10.94 | 30 | 46.88 |
|  | 80-84 | 11 | 17.80 | 62 | 100.32 | 4 | 9.66 | 24 | 57.97 |
|  | 85+ | 9 | 13.68 | 26 | 39.51 | 4 | 12.74 | 9 | 28.66 |
|  | All ages (60+) | 32 | 6.18 | 179 | 34.58 | 22 | 4.49 | 93 | 18.98 |
| 2015 | 60-64 | 1 | 0.76 | 6 | 4.54 | 0 | 0.00 | 2 | 1.35 |
|  | 65-69 | 1 | 0.94 | 14 | 13.17 | 1 | 0.82 | 14 | 11.42 |
|  | 70-74 | 6 | 7.42 | 39 | 48.21 | 5 | 6.06 | 18 | 21.82 |
|  | 75-79 | 8 | 11.35 | 36 | 51.06 | 4 | 6.25 | 30 | 46.88 |
|  | 80-84 | 10 | 16.18 | 63 | 101.94 | 7 | 16.91 | 27 | 65.22 |
|  | 85+ | 8 | 12.16 | 27 | 41.03 | 3 | 9.55 | 9 | 28.66 |
|  | All ages (60+) | 34 | 6.57 | 185 | 35.74 | 20 | 4.08 | 100 | 20.41 |
| 2016 | 60-64 | 0 | 0.00 | 6 | 4.54 | 1 | 0.68 | 3 | 2.03 |
|  | 65-69 | 3 | 2.82 | 18 | 16.93 | 1 | 0.82 | 14 | 11.42 |
|  | 70-74 | 4 | 4.94 | 39 | 48.21 | 4 | 4.85 | 18 | 21.82 |
|  | 75-79 | 7 | 9.93 | 41 | 58.16 | 7 | 10.94 | 29 | 45.31 |
|  | 80-84 | 10 | 16.18 | 60 | 97.09 | 7 | 16.91 | 31 | 74.88 |
|  | 85+ | 3 | 4.56 | 26 | 39.51 | 1 | 3.18 | 7 | 22.29 |
|  | All ages (60+) | 27 | 5.22 | 190 | 36.71 | 21 | 4.29 | 102 | 20.82 |
| 2017 | 60-64 | 1 | 0.76 | 7 | 5.29 | 0 | 0.00 | 3 | 2.03 |
|  | 65-69 | 2 | 1.88 | 16 | 15.05 | 1 | 0.82 | 15 | 12.23 |
|  | 70-74 | 2 | 2.47 | 37 | 45.74 | 8 | 9.70 | 24 | 29.09 |
|  | 75-79 | 10 | 14.18 | 47 | 66.67 | 6 | 9.38 | 32 | 50.00 |
|  | 80-84 | 12 | 19.42 | 65 | 105.18 | 8 | 19.32 | 29 | 70.05 |
|  | 85+ | 13 | 19.76 | 33 | 50.15 | 5 | 15.92 | 9 | 28.66 |
|  | All ages (60+) | 40 | 7.73 | 205 | 39.61 | 28 | 5.72 | 112 | 22.86 |

aDirect standardization using the 2010 Faroese populations structure as standard population:

**Female 2010 population**: age 60-64: n=1323; age 65-69: n=1063; age 70-74: n=809; age 75-79: n=705; age 80-84: n=618; ≥85+: n=658. All ages (60+): n=5176. Total female population: n=23299.

**Male 2010 population:** age 60-64: n=1480; age 65-69: n=1226; age 70-74: n=825; age 75-79: n=640; age 80-84: n=414; ≥85+: n=314. All ages (60+): n=4899. Total female population: n=25148.