**Supplementary Table 1. Survey response frequencies in the total sample, and by gender and length of work experience**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | **All****(n=420)** | **Sex** | **Number of working years** |
|  |  | **Men****(n=277)** | **Women****(n=143)** | **p-value** | **≤14****(n=107)** | **15-23****(n=108)** | **24-31****(n=101)** | **≥32****(n=104)** | **p-value** |
| Do you encounter mentally competent older patients who consent to their relatives being informed about their state of health? | Always | 10 (2.4) | 5 (1.8) | 5 (3.5) | 0.32 | 4 (3.7) | 2 (1.9) | 2 (2.0) | 2 (1.9) | 0.77 |
| Often | 174 (41.4) | 110 (39.7) | 64 (44.8) | 0.32 | 42 (39.3) | 48 (44.4) | 42 (41.6) | 42 (40.4) | 0.88 |
| Sometimes | 199 (47.4) | 135 (48.7) | 64 (44.8) | 0.44 | 55 (51.4) | 47 (43.5) | 48 (47.5) | 49 (47.1) | 0.72 |
| Never | 37 (8.8) | 27 (9.7) | 10 (7) | 0.35 | 6 (5.6) | 11 (10.2) | 9 (8.9) | 11 (10.6) | 0.57 |
| When the mentally competent older patient consents to information about his/her condition being shared with family members, do you ask him/her the reason? | Always | 117 (28.3) | 81 (29.2) | 36 (25.2) | 0.38 | 25 (23.4) | 36 (33.3) | 27 (26.7) | 29 (27.9) | 0.43 |
| Often | 58 (13.8) | 35 (12.6) | 23 (16.1) | 0.33 | 20 (18.7) | 12 (11.1) | 15 (14.9) | 11 (10.6) | 0.28 |
| Sometimes | 121 (28.8) | 70 (25.3) | 51 (35.7) | 0.03 | 35 (32.7) | 26 (24.1) | 32 (31.7) | 28 (26.9) | 0.46 |
| Never | 117 (27.9) | 84 (30.3) | 33 (23.1) | 0.12 | 26 (24.3) | 33 (30.6) | 26 (25.7) | 32 (30.8) | 0.63 |
| Missing | 7 (1.7) | 7 (2.5) | 0 (0.0) |  | 1 (0.9) | 1 (0.9) | 1 (1.0) | 4 (3.8) | 0.26 |
| If the older patient is not mentally competent, who breaks the bad news about his/her condition to him/her? *(multiple answers allowed)* | Relatives | 396 (94.3) | 260 (93.5) | 136 (95.1) | 0.60 | 100 (93.5) | 105 (97.2) | 94 (93.1) | 97 (93.3) | 0.51 |
| Support administrator | 119 (28.3) | 73 (26.4) | 46 (32.2) | 0.21 | 21 (19.6) | 38 (35.2) | 28 (27.7) | 32 (30.8) | 0.08 |
| General Practitioner | 106 (25.2) | 71 (25.6) | 35 (24.5) | 0.80 | 22 (20.6) | 30 (27.8) | 24 (23.8) | 30 (28.8) | 0.49 |
| Anyone | 0 (0.0) | 0 (0.0) | 0 (0.0) | - | 107 (100.0) | 108 (100.0) | 101 (100.0) | 104 (100.0) | NA |
| Other | 15 (3.6) | 12 (4.3) | 3 (2.1) | 0.24 | 5 (4.7) | 2 (1.9) | 3 (3.0) | 5 (4.8) | 0.60 |
| If the mentally competent older patient has no relatives to take care of him/her, do you break the news of a poor prognosis to him/her?\* | Always | 61 (23.6) | 54 (30.2) | 7 (8.9) | <0.001 | 16 (26.7) | 15 (20.5) | 17 (28.3) | 13 (20.0) | 0.59 |
| Often | 69 (26.7) | 47 (26.3) | 22 (27.8) | 0.79 | 15 (25.0) | 23 (31.5) | 15 (25.0) | 16 (24.6) | 0.76 |
| Sometimes | 87 (33.7) | 53 (29.6) | 34 (43) | 0.04 | 22 (36.7) | 22 (30.1) | 18 (30.0) | 25 (38.5) | 0.64 |
| Never | 41 (15.9) | 25 (14.0) | 16 (20.3) | 0.20 | 7 (11.7) | 13 (17.8) | 10 (16.7) | 11 (16.9) | 0.78 |
| Even if you do so rarely, where do you break bad news to an elderly patient?*(multiple answers allowed)* | Hospital room | 226 (53.8) | 149 (53.8) | 77 (53.8) | 0.99 | 64 (59.8) | 55 (50.9) | 49 (48.5) | 58 (55.8) | 0.36 |
| Doctor office | 177 (42.1) | 124 (44.8) | 53 (37.1) | 0.13 | 41 (38.3) | 43 (39.8) | 50 (49.5) | 43 (41.3) | 0.37 |
| Living room | 17 (4.0) | 9 (3.2) | 8 (5.6) | 0.25 | 6 (5.6) | 3 (2.8) | 4 (4.0) | 4 (3.8) | 0.77 |
| Corridor | 4 (1.0) | 2 (0.7) | 2 (1.4) | 0.61 | 1 (0.9) | 1 (0.9) | 1 (1.0) | 1 (1.0) | 1.00 |
| Other | 49 (11.7) | 31 (11.2) | 18 (12.6) | 0.67 | 9 (8.4) | 19 (17.6) | 8 (7.9) | 13 (12.5) | 0.10 |
| Missing | 4 (1.0) | 2 (0.7) | 2 (1.4) |  | 0 (0.0) | 1 (0.9) | 1 (1.0) | 2 (1.9) |  |
| How would you describe the places that you use to break bad news? *(maximum two answers)* | Barrier-free | 102 (24.3) | 66 (23.8) | 36 (25.2) | 0.76 | 21 (19.6) | 30 (27.8) | 30 (29.7) | 21 (20.2) | 0.21 |
| Noises-free  | 306 (72.9) | 194 (70.0) | 112 (78.3) | 0.08 | 90 (84.1) | 80 (74.1) | 69 (68.3) | 67 (64.4) | 0.008 |
| Comfortable environment | 167 (39.8) | 114 (41.2) | 53 (37.1) | 0.42 | 48 (44.9) | 41 (38.0) | 38 (37.6) | 40 (38.5) | 0.67 |
| Architectural accessibility | 40 (9.5) | 24 (8.7) | 16 (11.2) | 0.40 | 12 (11.2) | 11 (10.2) | 11 (10.9) | 6 (5.8) | 0.51 |
| Other | 47 (11.2) | 35 (12.6) | 12 (8.4) | 0.19 | 10 (9.3) | 10 (9.3) | 15 (14.9) | 12 (11.5) | 0.54 |
|  | Missing | 5 (1.2) | 2 (0.7) | 3 (2.1) |  | 1 (0.9) | 1 (0.9) | 1 (1.0) | 2 (1.9) |  |
| Patients often complain about not always seeing the same doctor: does your hospital provide continuity in therapeutic care for the older patient? | Always | 22 (5.2) | 13 (4.7) | 9 (6.3) | 0.49 | 7 (6.5) | 3 (2.8) | 6 (5.9) | 6 (5.8) | 0.61 |
| Generally | 219 (52.1) | 141 (50.9) | 78 (54.5) | 0.48 | 55 (51.4) | 55 (50.9) | 53 (52.5) | 56 (53.8) | 0.98 |
| Generally no | 158 (37.6) | 108 (39.0) | 50 (35.0) | 0.42 | 39 (36.4) | 47 (43.5) | 37 (36.6) | 35 (33.7) | 0.49 |
| Never | 20 (4.8) | 14 (5.1) | 6 (4.2) | 0.70 | 6 (5.6) | 3 (2.8) | 5 (5.0) | 6 (5.8) | 0.72 |
| Missing | 1 (0.2) | 1 (0.4) | 0 (0.0) |  | 0 (0.0) | 0 (0.0) | 0 (0.0) | 1 (1.0) |  |
| Have you ever received psychological help in making the decision to break bad news? | Always | 32 (7.6) | 21 (7.6) | 11 (7.7) | 0.97 | 9 (8.4) | 8 (7.4) | 9 (8.9) | 6 (5.8) | 0.84 |
| Often | 51 (12.1) | 27 (9.7) | 24 (16.8) | 0.04 | 11 (10.3) | 10 (9.3) | 17 (16.8) | 13 (12.5) | 0.35 |
| Sometimes | 106 (25.2) | 77 (27.8) | 29 (20.3) | 0.09 | 30 (28.0) | 27 (25.0) | 25 (24.8) | 24 (23.1) | 0.87 |
| Never | 105 (35.7) | 95 (34.3) | 55 (38.5) | 0.40 | 42 (39.3) | 43 (39.8) | 31 (30.7) | 34 (32.7) | 0.41 |
| Missing | 81 (19.3) | 57 (20.6) | 24 (16.8) |  | 15 (14.0) | 20 (18.5) | 19 (18.8) | 27 (26.0) |  |
| With a patient with a serious terminal disease in mind, how do you judge the following sentence: “your condition is incurable, but we will take care of you”? *(maximum two answers)* | Clear | 91 (21.7) | 63 (22.7) | 28 (19.6) | 0.46 | 25 (23.4) | 29 (26.9) | 22 (21.8) | 15 (14.4) | 0.16 |
| Contradictory | 45 (10.7) | 31 (11.2) | 14 (9.8) | 0.66 | 12 (11.2) | 10 (9.3) | 10 (9.9) | 13 (12.5) | 0.88 |
| Useful | 138 (32.9) | 90 (32.5) | 48 (33.6) | 0.82 | 39 (36.4) | 38 (35.2) | 26 (25.7) | 35 (33.7) | 0.36 |
| Necessary | 67 (16.0) | 38 (13.7) | 29 (20.3) | 0.08 | 15 (14.0) | 16 (14.8) | 18 (17.8) | 18 (17.3) | 0.85 |
| To avoid | 97 (32.1) | 70 (25.3) | 27 (18.9) | 0.14 | 22 (20.6) | 24 (22.2) | 22 (21.8) | 29 (27.9) | 0.60 |
| Gives hope | 99 (23.6) | 63 (22.7) | 36 (25.2) | 0.58 | 19 (17.8) | 30 (27.8) | 28 (27.7) | 22 (21.2) | 0.22 |
| Painful | 91 (21.7) | 56 (20.2) | 35 (24.5) | 0.32 | 26 (24.3) | 29 (26.9) | 22 (21.8) | 14 (13.5) | 0.10 |
| Missing | 3 (0.7) | 2 (0.7) | 1 (0.7) |  | 1 (0.9) | 0 (0.0) | 0 (0.0) | 2 (1.9) |  |

\*This item was included in an updated version of the questionnaire administered to only a subsample of 258 individuals.

**Supplementary Table 2. Survey response frequencies by medical specialty**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | **Specialty area** |  |
|  |  | **Clinical medicine****(n=239)** | **Surgery****(n=137)** | **Services****(n=35)** | **p-value** |
| Do you believe that a mentally competent terminal geriatric patient should be openly and directly informed of his/her condition? | Always | 27 (11.3) | 25 (18.2) | 7 (20.0) | 0.11 |
| Generally | 155 (64.9) | 85 (62.0) | 22 (62.9) | 0.86 |
| Generally not | 51 (21.3) | 20 (14.6) | 5 (14.3) | 0.22 |
| Never | 4 (1.7) | 6 (4.4) | 1 (2.9) | 0.29 |
| Missing | 2 (0.8) | 1 (0.7) | 0 (0.0) |  |
| Do you evaluate an older patient’s cognitive, functional and family background, before breaking news of a terminal diagnosis? | Always | 163 (68.2) | 98 (71.5) | 22 (62.9) | 0.58 |
| Often | 49 (20.5) | 19 (13.9) | 6 (17.1) | 0.27 |
| Sometimes | 15 (6.3) | 13 (9.5) | 4 (11.4) | 0.38 |
| Never | 6 (2.5) | 4 (2.9) | 1 (2.9) | 0.97 |
| Missing | 6 (2.5) | 3 (2.2) | 2 (5.7) |  |
| Do you encounter relatives of a mentally competent terminal patient who request that the patient not be informed about his/her terminal condition? | Always | 16 (6.7) | 1 (0.7) | 1 (2.9) | 0.02 |
| Often | 157 (65.7) | 87 (63.5) | 17 (48.6) | 0.15 |
| Sometimes | 65 (27.2) | 47 (34.3) | 17 (48.6) | 0.03 |
| Never | 1 (0.4) | 0 (0.0) | 0 (0.0) | 0.70 |
| Missing | 0 (0.0) | 2 (1.5) | 0 (0.0) |  |
| Do you encounter mentally competent older patients who consent to their relatives being informed about their state of health? | Always | 4 (1.7) | 3 (2.2) | 2 (5.7) | 0.31 |
| Often | 98 (41.0) | 55 (40.1) | 16 (45.7) | 0.84 |
| Sometimes | 118 (49.4) | 64 (46.7) | 14 (40.0) | 0.56 |
| Never | 19 (7.9) | 15 (10.9) | 3 (8.6) | 0.62 |
| When the mentally competent older patient consents to information about his/her condition being shared with family members, do you ask him/her the reason? | Always | 68 (28.5) | 40 (29.2) | 8 (22.9) | 0.75 |
| Often | 39 (16.3) | 15 (10.9) | 4 (11.4) | 0.32 |
| Sometimes | 74 (31.0) | 36 (26.3) | 8 (22.9) | 0.46 |
| Never | 56 (23.4) | 42 (30.7) | 14 (40.0) | 0.07 |
| Missing | 2 (0.8) | 4 (2.9) | 1 (2.9) |  |
| If the older patient is not mentally competent, who breaks the bad news about his/her condition to him/her? *(multiple answers allowed)* | Relatives | 226 (94.6) | 131 (95.6) | 30 (85.7) | 0.07 |
| Support administrator | 73 (30.5) | 31 (22.6) | 12 (34.3) | 0.18 |
| General Practitioner | 64 (26.8) | 31 (22.6) | 10 (28.6) | 0.62 |
| Anyone | 239 (100.0) | 137 (100.0) | 35 (100.0) | - |
| Other | 5 (2.1) | 7 (5.1) | 3 (8.6) | 0.09 |
| If the mentally competent older patient has no relatives to take care of him/her, do you break the news of a poor prognosis to him/her?\* | Always | 27 (20.0) | 27 (28.1) | 4 (20.0) | 0.33 |
| Often | 39 (28.9) | 22 (22.9) | 7 (35.0) | 0.43 |
| Sometimes | 49 (36.3) | 32 (33.3) | 4 (20.0) | 0.35 |
| Never | 20 (14.8) | 15 (15.6) | 5 (25.0) | 0.51 |
| Even if you do so rarely, where do you break bad news to an elderly patient?*(multiple answers allowed)* | Hospital room | 140 (58.6) | 65 (47.4) | 17 (48.6) | 0.09 |
| Doctor office | 95 (39.7) | 67 (48.9) | 11 (31.4) | 0.09 |
| Living room | 8 (3.3) | 7 (5.1) | 1 (2.9) | 0.66 |
| Corridor | 2 (0.8) | 2 (1.5) | 0 (0.0) | 0.70 |
| Other | 26 (10.9) | 15 (10.9) | 7 (20.0) | 0.28 |
| Missing | 2 (0.8) | 2 (1.5) | 0 (0.0) | - |
| How would you describe the places that you use to break bad news? *(maximum two answers)* | Barrier-free | 59 (24.7) | 31 (22.6) | 7 (20.0) | 0.79 |
| Noises-free  | 179 (74.9) | 93 (67.9) | 27 (77.1) | 0.28 |
| Comfortable environment | 96 (40.2) | 53 (38.7) | 13 (37.1) | 0.92 |
| Architectural accessibility | 25 (10.5) | 12 (8.8) | 3 (8.6) | 0.84 |
| Other | 21 (8.8) | 22 (16.1) | 4 (11.4) | 0.10 |
|  | Missing | 5 (2.1) | 0 (0.0) | 0 (0.0) |  |
| When you break a terminal older patient about his/her disease, are you able to take your time? | Always | 107 (44.8) | 70 (51.1) | 8 (22.9) | 0.01 |
| Often | 72 (30.1) | 32 (23.4) | 15 (42.9) | 0.06 |
| Sometimes | 48 (20.1) | 28 (20.4) | 11 (31.4) | 0.30 |
| Never | 10 (4.2) | 4 (2.9) | 0 (0.0) | 0.41 |
| No response | 2 (0.8) | 3 (2.2) | 1 (2.9) |  |
| To ensure a mentally competent patient understands the bad news, which sentence do you consider it more appropriate to ask? | Have I been clear with you? | 24 (10.0) | 37 (27.0) | 3 (8.6) | <0.001 |
| Do you need more information? | 113 (47.3) | 74 (54.0) | 20 (57.1) | 0.32 |
| Have you understood? | 19 (7.9) | 5 (3.6) | 1 (2.9) | 0.17 |
| Can you repeat what I have just said, please? | 4 (1.7) | 0 (0.0) | 0 (0.0) | 0.23 |
| What do you think about what I have just said? | 86 (36.0) | 20 (14.6) | 10 (28.6) | <0.001 |
| Missing | 4 (1.7) | 7 (5.1) | 1 (2.9) | 0.16 |
| Patients often complain about not always seeing the same doctor: does your hospital provide continuity in therapeutic care for the older patient? | Always | 11 (4.6) | 8 (5.8) | 2 (5.7) | 0.86 |
| Generally | 122 (51.0) | 76 (55.5) | 17 (48.6) | 0.64 |
| Generally no | 93 (38.9) | 48 (35.0) | 13 (37.1) | 0.76 |
| Never | 13 (5.4) | 4 (2.9) | 3 (8.6) | 0.31 |
| Missing | 0 (0.0) | 1 (0.7) | 0 (0.0) |  |
| Do you need psychological support when you have to inform an older patient of a terminal diagnosis? | Always | 9 (3.8) | 2 (1.5) | 1 (2.9) | 0.44 |
| Often | 37 (15.5) | 14 (10.2) | 7 (20.0) | 0.21 |
| Sometimes | 125 (52.3) | 64 (46.7) | 15 (42.9) | 0.41 |
| Never | 67 (28.0) | 57 (41.6) | 11 (31.4) | 0.03 |
| Missing | 1 (0.4) | 0 (0.0) | 1 (2.9) |  |
| Have you ever received psychological help in making the decision to break bad news? | Always | 19 (7.9) | 10 (7.3) | 3 (8.6) | 0.96 |
| Often | 36 (15.1) | 10 (7.3) | 5 (14.3) | 0.08 |
| Sometimes | 61 (25.5) | 36 (26.3) | 7 (20.0) | 0.74 |
| Never | 83 (34.7) | 49 (35.8) | 13 (37.1) | 0.95 |
| Missing | 40 (16.7) | 32 (23.4) | 7 (20.0) |  |
| With a patient with a serious terminal disease in mind, how do you judge the following sentence: “your condition is incurable, but we will take care of you”? *(maximum two answers)* | Clear | 49 (20.5) | 32 (23.4) | 7 (20.0) | 0.79 |
| Contradictory | 28 (11.7) | 14 (10.2) | 1 (2.9) | 0.28 |
| Useful | 81 (33.9) | 37 (27.0) | 16 (45.7) | 0.09 |
| Necessary | 37 (15.5) | 21 (15.3) | 7 (20.0) | 0.78 |
| To avoid | 45 (18.8) | 41 (29.9) | 8 (22.9) | 0.048 |
| Gives hope | 61 (25.5) | 28 (20.4) | 8 (22.9) | 0.53 |
| Painful | 58 (24.3) | 26 (19.0) | 7 (20.0) | 0.47 |
| Missing | 2 (0.8) | 1 (0.7) | 0 (0.0) |  |

**Supplementary Figure 1. Reasons why a mentally competent terminal geriatric patient should or should not be openly and directly informed of his/her condition**



*Notes*. The graph on the left shows response frequencies from 328 physicians; the graph on the right shows response frequencies from 89 physicians.