**Development and implementation of a novel survey to evaluate the burden and quality of life of caregivers of patients with glioblastoma**

**Additional file 6.** Increase in CD symptoms associated with more caregivers having greater health needs

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Survey question | Survey question answer options | All (*n* = 185) | Number of CD symptoms perceived by caregiver\* | | | *p* value† | | |
| Low: 0–3 (*n* = 62) | Intermediate: 4–6 (*n* = 80) | High: 7–9 (*n* = 43) | Low vs Intermediate | Intermediate vs High | Low vs High |
| *Since my loved one’s diagnosis of GBM, I am still able to maintain a healthy lifestyle as much as I used to.* | Not at all | 20 (11) | 2 (3) | 11 (14) | 7 (17) | **<0.01** | 0.31 | **<0.01** |
| A little bit | 56 (31) | 7 (11) | 28 (35) | 21 (51) |
| Somewhat | 36 (20) | 15 (25) | 17 (21) | 4 (10) |
| Quite a bit | 55 (30) | 28 (46) | 20 (25) | 7 (17) |
| Very much | 15 (8) | 9 (15) | 4 (5) | 2 (5) |
| *I have not been able to keep up with my own medical care. For example, I have missed or had to reschedule my medical checkups and appointments.* | Not at all | 37 (20) | 20 (33) | 12 (15) | 5 (12) | **0.01** | 0.38 | **<0.01** |
| A little bit | 47 (26) | 19 (31) | 21 (26) | 7 (17) |
| Somewhat | 30 (16) | 9 (15) | 15 (19) | 6 (15) |
| Quite a bit | 43 (24) | 12 (20) | 20 (25) | 11 (27) |
| Very much | 25 (14) | 1 (2) | 12 (15) | 12 (29) |
| *My health has worsened in the past 30 days.* | Not at all | 50 (27) | 26 (43) | 17 (21) | 7 (17) | **0.03** | 0.19 | **<0.01** |
| A little bit | 59 (32) | 21 (34) | 26 (33) | 12 (29) |
| Somewhat | 45 (25) | 8 (13) | 23 (29) | 14 (34) |
| Quite a bit | 23 (13) | 6 (10) | 13 (16) | 4 (10) |
| Very much | 5 (3) | 0 (0) | 1 (1) | 4 (10) |
| *It is much more difficult to take care of myself.* | Not at all | 27 (15) | 16 (26) | 6 (8) | 5 (12) | **0.01** | **0.046** | **0.01** |
| A little bit | 55 (30) | 23 (38) | 24 (30) | 8 (20) |
| Somewhat | 35 (19) | 11 (18) | 17 (21) | 7 (17) |
| Quite a bit | 52 (26) | 9 (15) | 30 (38) | 13 (32) |
| Very much | 13 (7) | 2 (3) | 3 (4) | 8 (20) |

*CD* cognitive dysfunction, *GBM* glioblastoma.

\*Caregivers were asked to identify CD symptoms in their loved one in the past 14 days, including memory problems, language problems, confusion, problems completing familiar tasks, changes in mood, judgment problems, and problems with motor coordination.

†Fisher’s exact test.