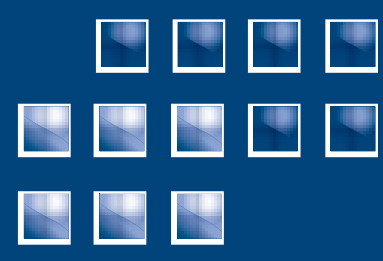


Impact of Emotional Blunting on Functioning in Patients With MDD: Do the Perspectives of Patients and HCPs Differ?



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BACKGROUND

- Emotional blunting—often described as the inability to feel positive or negative emotions, detachment, or the reduction of responsiveness—is a common symptom for many patients with major depressive disorder (MDD) taking antidepressants and has been increasingly recognized as an important factor that prevents full functional recovery¹⁻⁴
 - Anhedonia, the inability to experience pleasure, is one aspect of emotional blunting, and is a common symptom of depression and other mental health disorders^{1,5}
- Emotional blunting can have substantial impact on a patient’s daily life (family, work, and social life), including in the remission phase of depression.¹ Emotional blunting is also a common reason for discontinuation of antidepressant therapy⁶
- To date, only limited data exist evaluating the impact of emotional blunting on daily functioning in patients with depression
- This study investigated the impact of emotional blunting on overall patient functioning and quality of life (QoL) from the perspective of both patients and healthcare providers (HCPs)

METHODS

- This was a cross-sectional observational study conducted in Brazil, Canada, and Spain between April 15 and May 18, 2021, via an online self-completed survey

Inclusion Criteria

- Participants were members of a Kantar online panel; Kantar maintains separate panels of patients and HCPs
- Patient participants were aged 18–70 years, diagnosed with depression by a physician, currently using a prescribed antidepressant, and had experienced emotional blunting in the last 6 weeks
 - Emotional blunting was described as follows: “Emotional effects of depression and treatment vary, but may include, for example, feeling emotionally ‘numbed’ or ‘blunted’ in some way; lacking positive emotions or negative emotions; feeling detached from the world around you; or ‘just not caring’ about things that you used to care about”
- HCP participants were psychiatrists or primary care physicians (PCPs) who spend ≥75% of their time in direct patient care, are personally responsible for prescribing antidepressant medication, and prescribe antidepressants to ≥75% of their patients with depression
- HCPs accessed records for 2 different patients they treated most recently, 1 in the acute phase and 1 in the remission phase of depression
 - Patients assessed by HCPs (“HCP-assessed cohort”) were to be aged 18–70 years, diagnosed with depression, and receiving antidepressant medication
- Patients and HCPs indicated the patient’s current phase of depression
 - Acute: acute or severe symptoms requiring antidepressant treatment
 - Remission: symptoms have improved significantly, but residual symptoms may persist

Outcome Measures

- The Oxford Depression Questionnaire (ODQ)⁵ measures emotional blunting in patients with depression, including those treated with antidepressants. Scores range from 26–130; higher scores indicate greater detachment and reduction in emotions
 - Includes scores from 5 domains: general reduction in emotions, reduction in positive emotions, emotional detachment from others, not caring, and antidepressant as cause
 - Due to the specific nature of the questions about emotions in the first 4 domains, HCPs only answered questions for the antidepressant as cause domain
- The Functioning Assessment Short Test (FAST)⁷ measures functional capacity in daily life activities. Scores range from 0–72; higher scores indicate more difficulty in functioning
- In addition, patient and HCP surveys included questions about whether the patient had emotional blunting or anhedonia, and how their functioning in daily life was affected
 - Responses were rated from 1 to 7

Statistical Methods

- The analysis population comprised all respondents who met the inclusion criteria and completed the online survey
- Data are presented descriptively with means and standard deviations (SD) for continuous variables, and frequencies and percentages for categorical variables
- Comparisons of patient groups in the acute vs remission phase of depression and comparisons between the patient-reported and HCP-assessed cohorts were performed for continuous measures using t-tests and for proportions using Z-tests
- Multivariate regression analysis and Pearson correlation analysis were applied to examine the relationship between ODQ and FAST scores

RESULTS

Patient Characteristics

- A total of 752 patients and 383 HCPs, including 226 psychiatrists and 157 PCPs, participated
 - Patients and HCPs were located in Brazil, Canada, or Spain in approximately equal proportions (between 33% and 34% were from each country in each group)
- Approximately two-thirds of the study population was female, with an average age around 45 years
- More patients reported past or present drug or alcohol abuse compared to the HCP-assessed cohort (21% vs 9%), and more patients reported any trauma compared to the HCP-assessed cohort (97% vs 83%)

Table 1. Patient Characteristics (Patient-Reported and HCP-Assessed)

	Patient-Reported (N=752)	HCP-Assessed (N=766)
Sex, female, n (%)	466 (62)	482 (63)
Age in years, mean (SD)	45 (12.48)	44 (13.14)
Depression phase		
Acute	300 (40)	383 (50) ^a
Remission	452 (60)	383 (50) ^a
High school education or above, yes, n (%)	594 (79)	628 (82)
Work status		
Full-time, n (%)	346 (46)	330 (43)
Part-time, n (%)	91 (12)	84 (11)
Ever addicted to drugs or alcohol, yes, n (%)	158 (21)	69 (9)
Any trauma, yes, n (%)	729 (97)	636 (83)
Childhood, yes, n (%)	647 (86)	330 (43)
Recent, yes, n (%)	692 (92)	582 (76)
Trauma as reason for depression, yes, n (%)	424 (58) ^{b*}	274 (43) ^c
Depression more severe due to trauma, yes, n (%)	512 (70) ^{b*}	389 (61) ^c

^aBy design; ^bn=732; ^cn=638; *Statistically significant difference at the 95% CI when compared to the HCP-Assessed cohort.

ODQ and FAST Findings

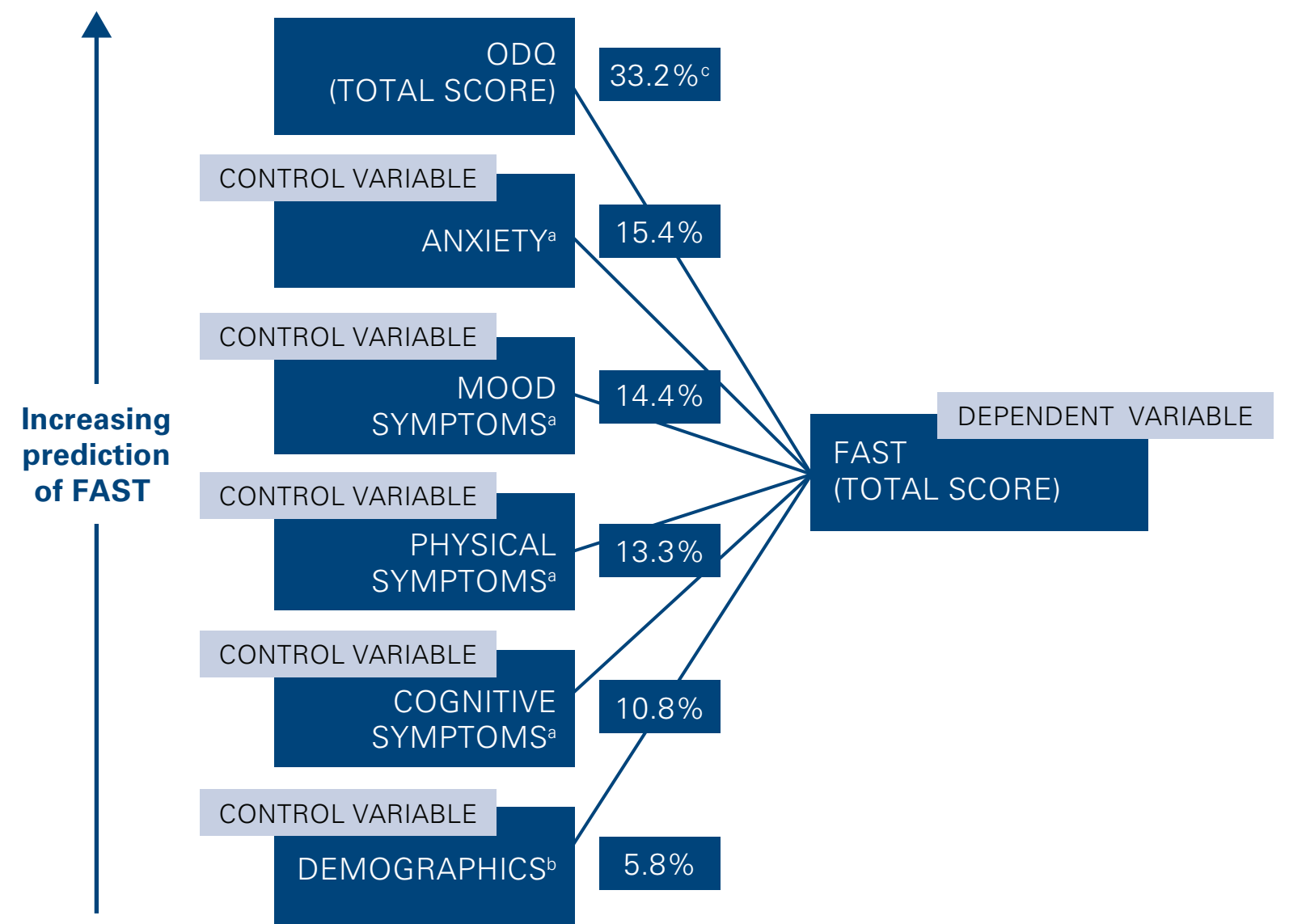
- In the patient-reported cohort, the mean (SD) ODQ (emotional blunting) score was 89.3 (18.26) out of 130. The mean patient-reported ODQ score was 94.8 (16.6) for patients in the acute phase of depression and 85.7 (18.42) for patients in remission (this difference was statistically significant at the 95% CI)
- ODQ Antidepressant as Cause mean scores were significantly higher (at the 95% CI) in the patient-reported cohort compared to the HCP-assessed cohort in both the acute (18 vs 12.5) and remission phases (17.6 vs 12.6)
- In the patient-reported cohort, 45% believed that their antidepressant medication was affecting their emotions and 39% were considering stopping (or had already stopped) their antidepressant because of its emotional side effects (**Table 2**)
 - In the HCP-assessed cohort, 30% believed that the antidepressant was responsible for emotional blunting (**Table 2**)

Table 2. Antidepressant (AD) as Cause of Emotional Blunting

	Patient Net Agreement (N=752)	HCP Net Agreement (N=766)
The AD is preventing me/the patient from feeling my/their emotions in some way	45%	30%
The AD seems to make me/the patient just not care about things that should matter to me/them	40%	17%
The AD seems to make me/the patient feel emotionally disconnected from people around me/them	42%	16%
The AD is preventing me/the patient from feeling pleasant emotions	33%	13%
The AD changes the way that I/the patient experiences my/their emotions in a way that is unhelpful (not helpful) to me/them at the moment	34%	10%
I/the patient have considered stopping (or have already stopped) my/their antidepressant because of its emotional side-effects	39%	18%

- Mean FAST scores were significantly higher in each phase of depression in the patient-reported cohort [acute phase = 47.0 (SD 15.81); remission phase = 33.5 (16.14)] compared with the HCP-assessed cohort [acute phase = 39.1 (15.83); remission phase = 19.4 (16.01)] (these comparisons were statistically significant at the 95% CI)
- In multivariate regression analysis, ODQ score was the strongest predictor of FAST score, accounting for 33% of the accumulative variance in FAST score (in combination with control variables) (**Figure 1**)
 - In the Pearson correlation analysis, higher ODQ scores were moderately ($r = 0.52$) correlated with higher FAST scores (decreasing function; $P < 0.01$)

Figure 1. Multivariate Regression Analysis to Predict Extent to Which FAST Score Is Predicted by ODQ Score

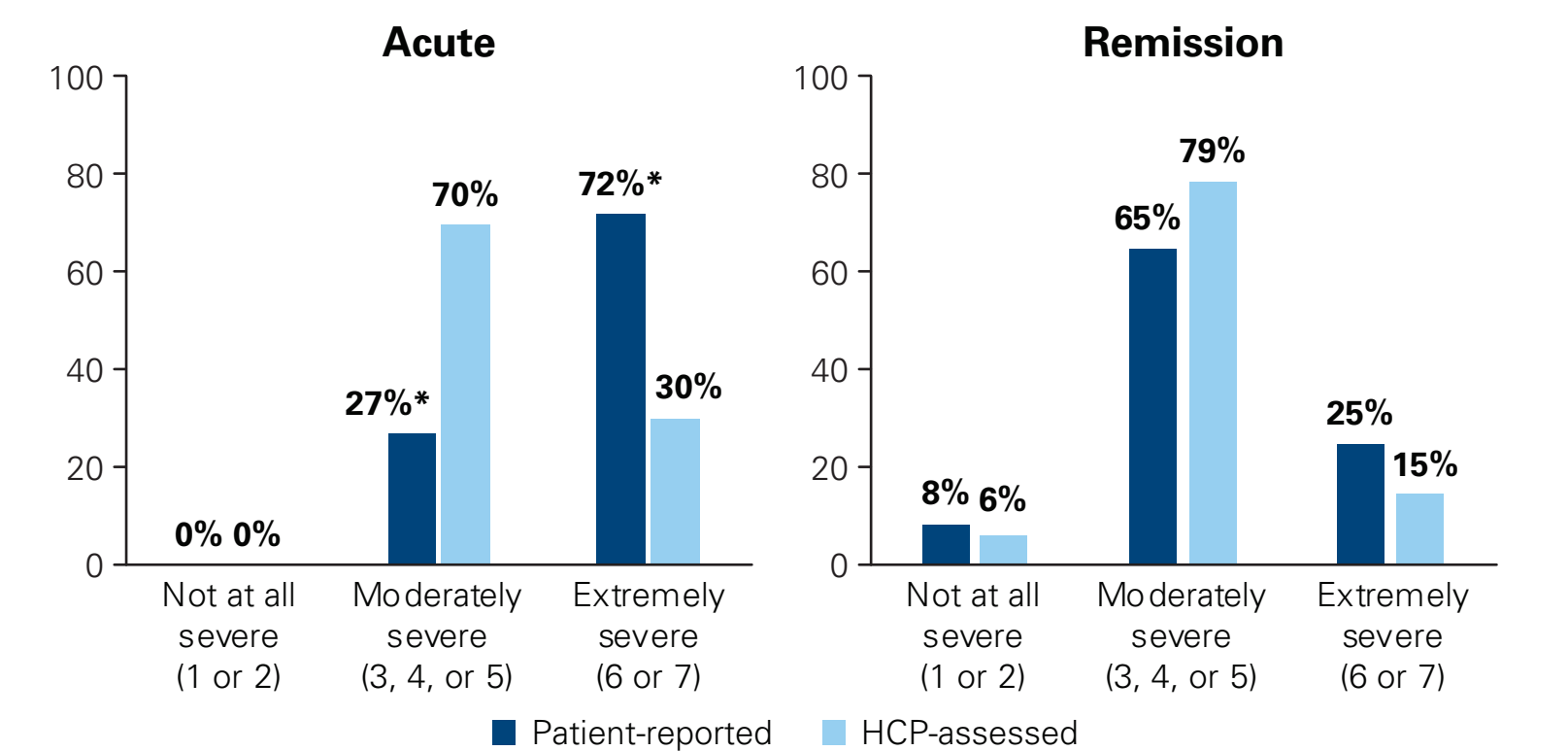


*Anxiety, mood symptoms (sadness, lack of enjoyment, hopelessness), physical symptoms (decrease in weight or appetite, disturbed sleep, fatigue, sexual dysfunction), and cognitive symptoms (trouble concentrating, difficulties making plans, forgetfulness) were assessed by the survey questionnaire; *Age, gender, education, and country; *ODQ percentage is accumulative, reflecting ODQ and control variables.
FAST, Functioning Assessment Short Test; ODQ, Oxford Depression Questionnaire.

Occurrence and Severity of Emotional Blunting

- In the HCP-assessed cohort, a larger proportion of patients in the acute (122/383, 32%) vs remission (52/383, 14%) phase (and 23% overall) experienced emotional blunting
 - By design, all patients in the patient-reported cohort reported emotional blunting
- In the acute phase, emotional blunting was rated more severe among patients compared to the HCP-assessed cohort (**Figure 2**)
 - 72% of the patient-reported cohort had extremely severe emotional blunting vs 30% in the HCP-assessed cohort (statistically significant at the 95% CI)
 - Accordingly, 27% of the patient-reported cohort had moderately severe emotional blunting vs 70% in the HCP-assessed cohort (statistically significant at the 95% CI)

Figure 2. Severity of Emotional Blunting by Phase of Depression



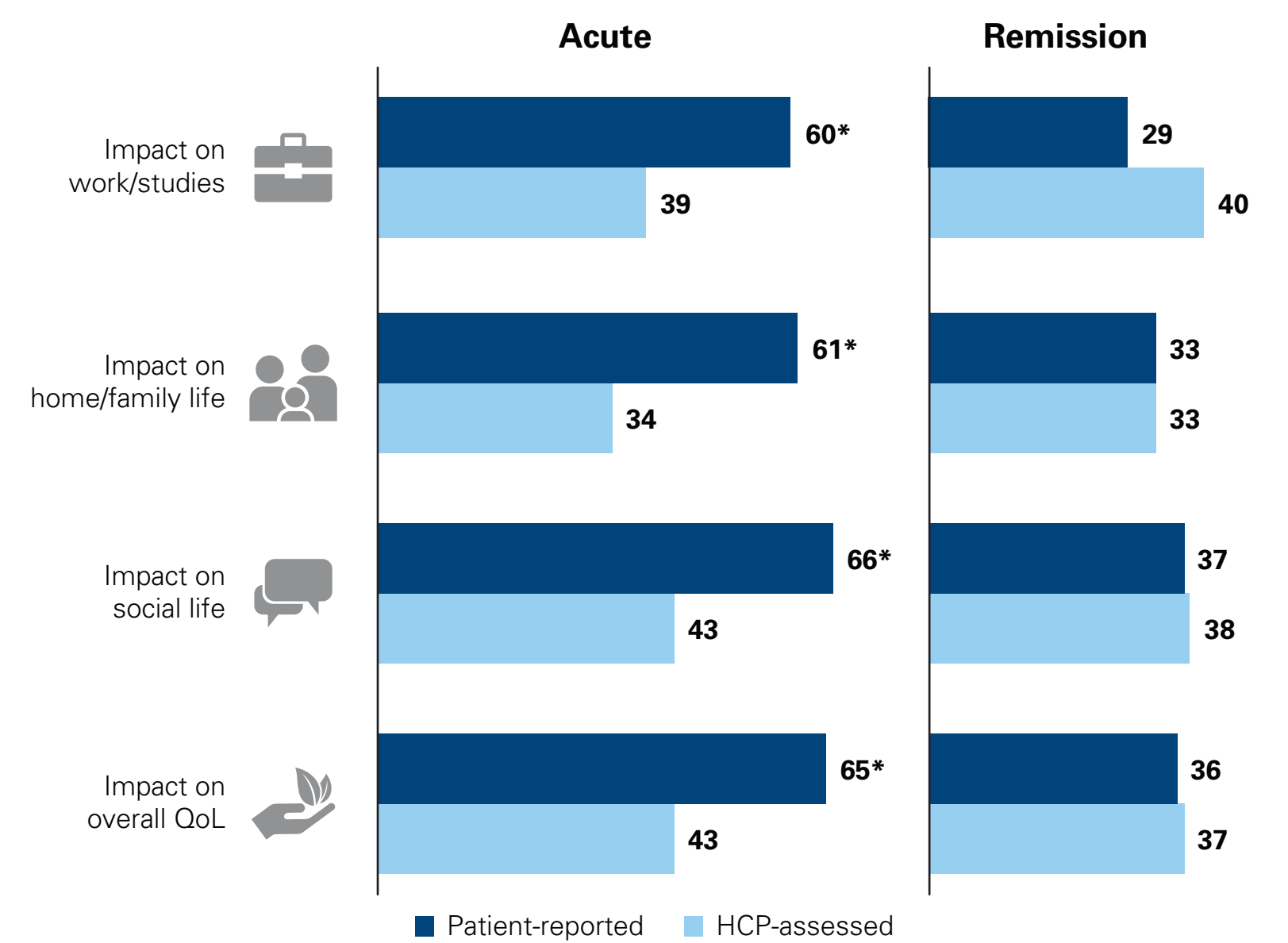
*Statistically significant difference at the 95% CI for acute phase patient-reported vs HCP-assessed cohort.
^aReported for patients with emotional blunting: patient-reported: acute, n = 300; remission, n = 452; HCP-assessed: acute, n = 122; remission, n = 52. Patient survey item: “How severe would you rate the emotional blunting experienced during this phase of depression? using a scale of 1 to 7, where 1 means not at all severe and 7 means extremely severe?”
CI, confidence interval; HCP, healthcare provider

Impact of Emotional Blunting on Functioning and QoL

- Of patients in the patient-reported cohort in the acute phase of depression, 60%–65% reported “significant impact” (rating of 6–7 out of 7) of emotional blunting on function and QoL (**Figure 3**)
 - These proportions were lower (34%–43%) in the HCP-assessed cohort, and the differences between patient-reported and HCP-assessed cohorts were statistically significant at the 95% CI for each comparison

- On all measures of function and QoL, the proportions of patients in the patient-reported cohort with “significant impact” of emotional blunting were significantly greater (at the 95% CI) than in the HCP-assessed cohort in the acute phase, but not in the remission phase (**Figure 3**)

Figure 3. Impact of Emotional Blunting on Function and QoL by Phase of Depression^a (% of Patients with Significant Impact^b)



*Statistically significant difference at the 95% CI for patient-reported vs HCP-assessed cohort within phase of depression.
^aReported for patients with emotional blunting: patient-reported: acute, n = 300; remission, n = 452; HCP-assessed: acute, n = 122; remission, n = 52. Patient survey item: “To what extent do you think your emotional blunting impacts your ability to function effectively at work or in studies/effectively at home or in family life/effectively in social life/and overall, to what extent do you think your lack of interest and pleasure in activities, impacts your overall QoL?”; “6–7 on 7-point scale.
CI, confidence interval; HCP, healthcare provider; QoL, quality of life.

- Among all patients (in either phase of depression) in the patient-reported cohort, 41%–48% reported “significant impact” of emotional blunting on the ability to function in daily life and on QoL
 - In the HCP-assessed cohort, 34%–41% of patients with emotional blunting were reported to experience “significant impact” on measures of function and QoL

- Patients reported a higher impact of emotional blunting on all aspects of daily functioning (work, family, and social life) and QoL than was described in the HCP-assessed cohort

Impact of Anhedonia on Functioning and QoL

- In the patient-reported cohort, anhedonia was experienced by a larger proportion of patients in the acute phase (231/300, 77%) vs remission phase (236/452, 52%) of depression
 - This was similar in the HCP-assessed cohort, with acute (255/383, 67%) vs remission (83/383, 22%)
- More than two-thirds (68%–77%) of patients with anhedonia in the acute phase of depression reported a “significant impact” (6–7 out of 7) of anhedonia on 4 measures of function and QoL (data not shown)
 - This proportion was lower in the HCP-assessed cohort (47%–57%)
- Among patients with anhedonia in either phase of depression, 52%–65% reported “significant impact” of anhedonia across 4 measures of function and QoL; this range appeared lower (43%–52%) in the HCP-assessed cohort

CONCLUSIONS

- The results of this study show that emotional blunting is associated with a substantial impact on all aspects of daily functioning, as well as lower QoL, for patients with depression in both the acute and remission phases
 - Emotional blunting was very prevalent and almost half (44%) of all patients, including 72% in the acute phase of depression, rated their emotional blunting as “severe”
 - ODQ, a measure of symptoms of emotional blunting, was the strongest predictor of impaired functioning when controlling for the impact of other symptoms of depression (mood, anxiety, cognitive and physical symptoms) and demographic characteristics.
- Patients perceived a greater impact of emotional blunting compared with HCPs’ assessments
 - Patients perceived greater severity of emotional blunting and the impact of emotional blunting on functioning compared with HCPs’ assessments
 - A higher proportion of patients vs HCPs perceived antidepressant medication along with depression as a cause of emotional blunting in the context of the acute phase of depression
 - According to patients, emotional blunting has a greater impact on QoL in the acute phase of depression, whereas HCPs perceived the impact to be no different between the acute and remission phases
- These results provide new insights on how patients and HCPs perceive emotional blunting differently and highlight the importance of treating emotional blunting to help patients suffering from MDD to reach not only remission from symptoms but also full functional recovery

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