

# How Do Patients Describe Their Depression? — Incorporating the Patient's Voice Into Instrument Development

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Presented at the ISPOR 15th Annual European Congress • 3-7 November 2012 • Berlin, Germany

## Background

- Major depressive disorder (MDD) is a highly prevalent and under-treated condition as well as a leading cause of disability in the US and worldwide.<sup>1</sup>
- Despite the availability of safe and effective pharmacological treatments for depression and the development of evidence-based treatment guidelines, a range of studies have demonstrated that a substantial number of patients with depression do not achieve symptom relief.<sup>2</sup>
- As novel treatments for depression are developed, the ability to assess depressive symptoms from the patient's point of view is vital.
- A range of questionnaires to evaluate aspects of depression from the patient's perspective are currently available, but their comprehensiveness and development histories are unclear.
- By exploring the patient experience of MDD through qualitative interviews, it is possible to better understand and document the specific depression-related concepts that are relevant to the patient as well as the patient's assessment of improvement in his or her condition.

## Objectives

- To identify the ways in which patients describe their symptoms of Major Depressive Disorder (MDD) and the impact of those symptoms on their lives, to inform the development of new patient-reported outcome (PRO) measures that effectively incorporate the patient's voice and perspective.

## Methods

- After appropriate IRB approval was obtained, individual qualitative interviews were conducted with adult patients with MDD who were recruited from 6 clinical sites in different geographical regions of the US.
- Patients were included if at screening they were between 18 and 65 years of age, had a Hamilton Depression Rating Scale (HAM-D) score of >18, and had experienced a depressive episode within the last 6 months.
- Patients were excluded if they had a current or past history of a personality disorder, schizophrenia or other psychotic disorder, obsessive compulsive

## Methods (continued)

- disorder, or post-traumatic stress disorder; had a significant risk of suicide; or had a positive urine drug screen or recent clinically significant alcohol abuse or drug use.
- Individual interviews (n=40) were conducted by trained researchers using a semi-structured interview guide designed to support open-ended exploratory interviews conducted to obtain both unprompted and prompted subject input about MDD symptoms and impacts, and how the subject felt these factors affected their ability to function.
- Interviews were audio-recorded, transcribed, cataloged and organized into a coding framework using Atlas.ti software.
- Coded concepts were grouped by similarity of content and analyzed to identify the most relevant expressions and most common language used by patients.
- An analysis of "saturation of concept," defining the point in the data collection process when no additional unique concepts were identified, was performed at the end of the qualitative interviews.

## Results

### Demographic and Clinical Characteristics

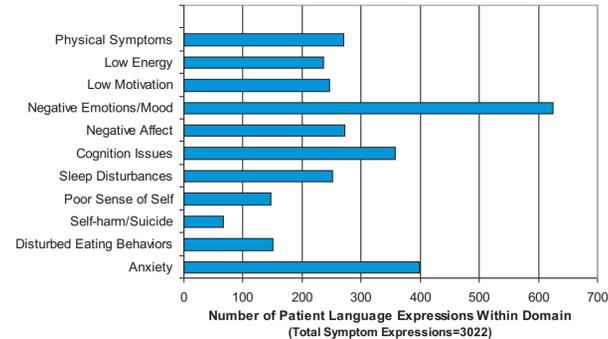
- Participants' mean±SD age was 46.2±11.8 years; 67.5% were female, and 45.0% described their race as white. 35.0% reported full-time employment. Mean±SD HAM-D Total Score at screening was 24.4±4.3. 50% reported taking no psychotropic medications (Table 1).

### MDD Symptom and Impact Domains

- A total of 3022 symptom-concept codes and 830 impact-concept codes were derived from the transcripts.
- Eleven different domains were developed in the coding framework for MDD symptoms (Figure 1). Domains with the greatest number of symptom expressions included "Negative Emotions/Mood" (624/3022 [20.6%] of expressions), "Anxiety" (398/3022 [13.2%]), and "Cognition Issues" (358/3022 [11.8%]). The domain with the fewest number of symptom expressions was "Self-Harm/Suicide" (66/3022 [2.2%]).

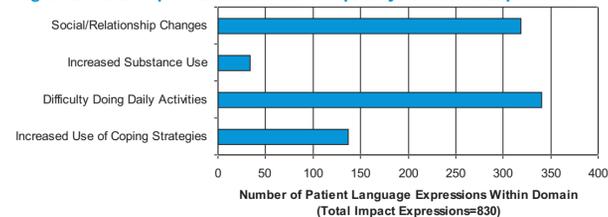
## Results (continued)

Figure 1. MDD Symptom Domains and Frequency of Patient Expression



- Four different impact domains were identified (Figure 2), with "Difficulty Doing Daily Activities" (340/830 [41.0%] of expressions) and "Social/Relationship Changes" (319/830 [38.4%]) receiving the greatest number of expressions. "Increased Substance Use" received the fewest number of expressions (34/830 [4.1%]).

Figure 2. MDD Impact Domains and Frequency of Patient Expression



## Results (continued)

### Concepts Within MDD Symptom and Impact Domains

- A range of concepts within each of the 11 MDD symptom and impact domains were identified. Tables 2 and 3 present the 3 most frequently expressed symptom and impact concepts by domain. Representative quotations are included to illustrate the variety of descriptions used by patients to communicate these domains.

Table 2. Most Frequently Expressed Symptom Concepts by Domain

Most Frequently Expressed Concepts in Each Symptom Domain	Number and % of Patient Language Expressions Within Concept (N=3022)	Number and % of Transcripts Contributing (N=40)	Representative Patient Language
<b>Physical Symptoms</b>			
Headaches	54 (1.8%)	18 (45.0%)	"I get more headaches than I have ever gotten"; "recent headaches I can't seem to shake"; "I get that extreme headache, somehow my depression induces it"
Bodily Pain	42 (1.4%)	18 (45.0%)	"sometimes physical pain"; "I am very achy"; "someone taking a knife and pinning me, like a quick stab or cramping"
Stomach Discomfort	42 (1.4%)	18 (45.0%)	"the bowel, your stomach is upset"; "I would have slight stomach pains"; "I get butterflies sometimes"
<i>Additional Physical Symptoms concepts identified: Breathing Problems, Chest Pressure, Dizziness, GI Problems, Heart Palpitations, Muscle Stiffness, Restlessness, Sweat, Tingling in Extremities, and Other Physical Symptoms</i>			
<b>Low Energy</b>			
Fatigue/Exhaustion	64 (2.1%)	17 (42.5%)	"crushing fatigue"; "I am just physically exhausted"; "you can be tired just because of things that are bothering you"
No/Low Energy	36 (1.2%)	19 (47.5%)	"I don't have the energy to get up and go"; "my energy is gone"; "my energy level starts to leave me"
Tiredness	95 (3.1%)	30 (75.0%)	"I am tired all of the time"; "issue with extreme tiredness"; "the more depressed I get, the more tired I get"
<i>Additional Low Energy concepts identified: Drained, Lethargic, Daytime Sleepiness, Weak, and Other Energy Symptoms</i>			
<b>Low Motivation</b>			
Desire to be Alone	55 (1.8%)	23 (57.5%)	"just want to be with myself"; "don't like to interact with anyone"; "the impetus is to kind of hibernate and cocoon"
Lack of Drive	48 (1.6%)	25 (62.5%)	"I don't want to do anything"; "just felt unmotivated"; "there's times when I just don't feel like doing anything at all"
Not Wanting to Get Out of Bed	60 (2.0%)	23 (57.5%)	"have to force myself to get up"; "I am in bed all day like yesterday"; "if it wasn't for being a parent and having a dog I probably wouldn't get out of bed"
<i>Additional Low Motivation concepts identified: Less/Lack of Interest, No Interest in Activities, No Interest in Chores, No Interest in Leaving Home, No Interest in Self-Care and Other Motivation Symptoms</i>			
<b>Negative Emotions/Mood</b>			
Anger	105 (3.5%)	27 (67.5%)	"at times angry, angry at the littlest things get me upset"; "I just flew off the handle, just ripped them right off of the hangers"; "angry, you know, punching things"
Irritability/Hostility	110 (3.6%)	29 (72.5%)	"wasn't as tolerant of situations as I usually am"; "things bother me, I am irritable"; "everything aggravates me and annoys me"
Sadness	181 (6.0%)	32 (80.0%)	"mostly I'm sad"; "get very sad when I think about my life"; "I want to know that I can feel the sadness and not let it completely overwhelm me"
<i>Additional Negative Emotions/Moods concepts identified: Crying, Decreased Pleasure in Things, Despair, Empty, Frustration, Less Compassionate, Mood Swings, Numbness, Rage, and Other Emotions/Mood Symptoms</i>			
<b>Negative Affect</b>			
Feeling Lonely	60 (2.0%)	28 (70.0%)	"I have people, but still feel lonely, like no one cares"; "loneliness, that's what I have"; "feeling alone in the world, have no one, no one to talk to or lean to"
Guilt	79 (2.6%)	22 (55.0%)	"I have a lot of feelings of guilt"; "the guilt runs random, full reign over my physical, mental being"; "guilty because I am not able to be doing what I really want to be doing"
Hopeless/Helpless	48 (1.6%)	18 (45.0%)	"I have a lot of hopelessness feeling"; "feeling of helplessness, being alone and cornered and can't fight back"; "I just feel locked in, stuck"
<i>Additional Negative Affect concepts identified: Focus on Negative, Shame, and Worthlessness</i>			
<b>Cognition Issues</b>			
Feeling Overwhelmed	87 (2.9%)	25 (62.5%)	"too many things happening at once"; "how am I going to do anything"; "beyond control of the situation, too overwhelmed"
Memory Issues	40 (1.3%)	16 (40.0%)	"I have a lot of short term memory loss" "I lose my vocabulary, try to think stupid things, name of somebody, cannot"; "lots of times I have lost track of things, lost things"
Poor Concentration	67 (2.2%)	22 (55.0%)	"I am really trying hard to think"; "can't even pay attention to what somebody is saying"; "I can't keep my concentration"
<i>Additional Cognition Issues concepts identified: Cognitive Lethargy, Daydreaming, Distraction, Fixation on Problems, Impulsivity, Indecisiveness, Intrusive Thoughts, Poor Comprehension, Racing Thoughts, and Other Cognitive Symptoms</i>			
<b>Sleep Disturbances</b>			
Difficulty Falling Asleep	66 (2.2%)	26 (65.0%)	"takes me almost 2 hours to go to sleep"; "just lay there, 2 hours later, still wide awake"; "I am thinking and know I won't be able to go to sleep"
Overleeping	54 (1.8%)	15 (37.5%)	"I would sleep for 3 days at a time"; "Yesterday all I did was sleep"; "I just sleep anytime I get"
Difficulty Remaining Asleep	55 (1.8%)	26 (65.0%)	"every night waking up at least 3 times a night"; "I have trouble staying asleep"; "when I go to sleep I am not going to stay asleep"
<i>Additional Sleep Disturbances concepts identified: Early Awakening, General Sleep Difficulty, and Insomnia</i>			
<b>Poor Sense of Self</b>			
Low Self-Efficacy	20 (0.7%)	13 (32.5%)	"can I really do this? can I do anything?"; "I was useless to my kids"; "days that definitely feel that I can't get anything done"
Low Self-Esteem	65 (2.2%)	24 (60.0%)	"I don't like to be a loser"; "I have very low self-esteem"; "you don't feel good about yourself"
Self-Blame	34 (1.1%)	10 (25.0%)	"I was like what a big stupid"; "thinking everything is my fault"; "I got very down on myself"
<i>Additional Poor Sense of Self concepts identified: Hate Self and Self as Victim</i>			
<b>Self-Harm/Suicide</b>			
Better Off Dead	11 (0.4%)	6 (15.0%)	"if I was dead, I wouldn't have to go through this"; "thought always passes that I am better off dead, yes"; "what's the point of being alive when I am depressed and sad all of the time"
Suicidal Ideation	9 (0.3%)	5 (12.5%)	"I became suicidal like briefly"; "occasionally I fixate on methods of suicide"; "used to have thoughts about it"
Thoughts of Death	31 (1.0%)	17 (42.5%)	"I thought about dying"; "I don't even fear it, one time I was sick, thought I was going to die"; "thought about I need to have an insurance policy"
<i>Additional Self-Harm/Suicide concepts identified: Self-Harm, and Other Self-Harm/Suicide Symptoms</i>			
<b>Disturbed Eating Behavior</b>			
Decreased Appetite	29 (1.0%)	14 (35.0%)	"don't feel hungry"; "swallow my food and I want to vomit"; "I'm just not hungry ugh food."
Overeating	48 (1.6%)	19 (47.5%)	"I self-medicate through food"; "worst symptom is eating, overeating"; "yesterday I ate a whole pizza"
Weight Gain	23 (0.8%)	15 (37.5%)	"I've gained weight"; "I gained 40 pounds" "I did gain 10 pounds, I was eating everything"
<i>Additional Disturbed Eating Behavior concepts identified: Increased Appetite, Under Eating, Weight Loss and Other Eating Behavior Symptoms</i>			
<b>Anxiety</b>			
Anxiety	118 (3.9%)	28 (70.0%)	"feeling like something bad is going to happen, anxious"; "I become anxious"; "I will be worried and anxious at the same time"
Stress	101 (3.3%)	19 (47.5%)	"I get so stressed"; "because of the stress I feel more depression"; "the stress is piling up and not recognizing the cues"
Worry	59 (2.0%)	23 (57.5%)	"something bad is going to happen today"; "I always worry"; "worrying too much about little things"
<i>Additional Anxiety Symptoms identified: Fear, Nervousness, and Panic Attack</i>			

Table 3. Most Frequently Expressed Impact Concepts by Domain

Most Frequently Expressed Concepts in Each Impact Domain	Number and % of Patient Language Expressions Within Concept (N=830)	Number and % of Transcripts Contributing (N=40)	Representative Patient Language
<b>Social/Relationship Changes</b>			
Fewer Social Engagements	69 (8.3%)	27 (65.5%)	"the opportunities are there but I decline them"; "I am always staying home and not going out"; "I tend to be less social"
Isolation	79 (9.5%)	22 (55.0%)	"I feel some form of isolation each week"; "I kind of push everyone away"; "I become really quiet and distant from everyone"
Negative Impact on Relationships	129 (15.5%)	35 (87.5%)	"depression is why I don't do a lot of it and my kids suffer the consequences"; "I don't feel fully present for relationships"; "don't want to be friends with anybody"
<i>Additional Social/Relationship Changes concepts identified included: Arguments/Bickering and Sexual Activity</i>			
<b>Increased Substance Use</b>			
Drink More	20 (2.4%)	10 (25.0%)	"I like alcohol"; "use it at times to mask"; "you have one and all of a sudden you are not sad"
More Drug Use	6 (0.7%)	3 (7.5%)	"I like weed"; "I use illicit drugs"; "use marijuana more"
Smoke More	5 (0.6%)	4 (10.0%)	"I guess I'll smoke more"; "cigarettes (help to ease symptoms)"
<i>Additional Increased Substance Use concepts identified: Drink Less</i>			
<b>Difficulty Doing Daily Activities</b>			
General Difficulty With Daily Activities	52 (6.3%)	15 (37.5%)	"can't get up and do things; can't do what needs to be done"; "I start to procrastinate on stuff"; "not getting things done the way I would like to"
Household Activities	65 (7.8%)	27 (67.5%)	"don't keep up with chores"; "can't get my butt off of the couch to go walk them, the dogs"; "I don't hand wash my car like I used to"
Work Activities	90 (10.8%)	29 (72.5%)	"I make frequent mistakes"; "I didn't want to go to work"; "in the office working, have to get up and move to another place to reset myself"
<i>Additional Difficulty Doing Daily Activities concepts identified: Exercise, Leisure Activities/Hobbies, Personal Care, and School Activities</i>			
<b>Increased Use of Coping Strategies</b>			
Avoidance/Denial/Distract/Escape	35 (4.2%)	17 (42.5%)	"don't want to deal"; "do a lot of things, like music, TV, distractions"; "sexually acting out"
Determination/Outlook/Self-Control	26 (3.1%)	11 (27.5%)	"I am a survivor, I can say, I can do this and this and I can get out of this"; "I force myself"; "trying to change my way of thinking"
Prayer/Religion/Socializing/Support	32 (3.9%)	12 (30.0%)	"just trying to pray"; "I had strong faith, my faith has dwindled"; "AA stuff, I can go to get a sponsor"
<i>Additional Increased Use of Coping Strategies concepts identified: Active/Lists/Medication/Vitamins and Insight/Relaxation/Other Personal Strategies</i>			

- "Sadness" was the most frequently expressed symptom concept (181/3022 [6.0%] of expressions), followed by "Anxiety" (118/3022 [3.9%]) and "Irritability/Hostility" (110/3022 [3.6%]).
- "Negative Impact on Relationships" was the most frequently expressed impact concept (129/830 [15.5%] of expressions) associated with MDD, followed by "Difficulty with Work Activities" (90/830 [10.8%]) and "Fewer Social Engagements" (69/830 [8.3%]).

### Saturation of Concepts

- Saturation of symptom concepts was achieved within the first 32 of 40 patient interviews.

## Conclusions

- A broad range of concepts and terminology is used by patients to describe the symptoms and impacts associated with their experience of depression.
- Participants identified symptoms that included both expected (based on the American Psychiatric Association [APA]'s Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision [DSM-IV-TR] 3 criteria) and those not commonly described as core symptoms of MDD (e.g., irritable mood, headaches).
- Organization of coded quotations into a coding framework allows for organized documentation, and greater ease in the selection of concepts and incorporation of the most meaningful patient language into early stages of PRO instrument development.

## Acknowledgements

Funding for this research was provided by the following PRO Consortium members: Abbott Laboratories; Bristol-Myers Squibb Company; Eli Lilly and Company; Forest Laboratories, Inc.; Janssen Global Services, LLC; Pfizer Inc.; Shire plc; and Sunovion Pharmaceuticals, Inc.

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