

How do Patients with Depression and their Providers Talk about Anhedonia? An Ethnographic Analysis of Healthcare Provider Conversations with Patients in the Clinical Setting

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Background

- Anhedonia is a core diagnostic symptom of major depressive disorder (MDD) per the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) and International Classification of Diseases, Tenth Revision (ICD10)^{1,2}
 - It is characterized by diminished interest in or pleasure from activities of daily life¹
- In people with MDD, the presence of anhedonia is associated with a range of negative outcomes including higher risk of suicide, poor treatment response, impaired function and quality of life, greater disease chronicity and refractoriness, and reduced sexual desire/interest³⁻⁹
- Despite studies examining its impact on social interactions and psychosocial functioning, limited data exist on how anhedonia is discussed and identified in conversations between healthcare professionals (HCPs) and patients within clinical settings
- The purpose of this ethnographic analysis (EA) was to uncover how patients and HCPs describe anhedonia symptoms during routine clinical consultations

Methods

- Dialogues were gathered from an existing database of over 195,000 US-based recording of in-office conversations between HCPs and patients with associated time-aligned transcripts
 - Both HCPs and patients/caregivers opted into audio recording of the visit for research purposes. Data were not collected as part of this (or any) specific project
- Overall, the database included recordings of more than 1,500 unique HCPs and 174,000 unique patients at the time of the study. These covered a wide range of disease states, including MDD
- Eligible dialogues were recorded in community-based private practices (US only) between January 1, 2017, and November 30, 2022 (inclusive) and were listed by HCPs as being an MDD interaction type. Patients were required to be ≥18 years old. HCP specialties that were included were primary care, family medicine, internal medicine, and psychiatry
- Qualitative and quantitative analyses of the dialogues were performed using the retrospective, anonymized, syndicated, dialogue data, using techniques based on the principles of sociolinguistics and conversation analyses as well as computational linguistics and corpus analyses¹⁰⁻¹³
- The EA explored patient/caregiver and HCP language and behavior during in-office visits. Based on this, four keyword domains related to anhedonia were identified for each group

Results

- In total, transcripts of 60 recorded conversations during outpatient HCP-patient visits for the clinical management of MDD in from were included in the analysis
 - Dialogues involved 60 unique patients and were recorded by 29 unique HCPs (35 recordings from 10 unique psychiatrists; 25 recordings from 19 unique primary care physicians)
- The final sample included dialogues recorded between March 2017 to March 2022
- Mean (range) duration of the recordings was 11:51 (1:43–36:19) mins
- Patient demographics can be found in **Table 1**

Table 1: Patient demographics for EA examining how patients and HCPs discuss anhedonia in routine clinical practice

Characteristic	n (%)
Number of unique patients	60 (100)
Sex	
Male	17 (28)
Female	43 (72)
Age range, years	
18–24	4 (7)
25–34	6 (10)
35–44	7 (12)
45–54	7 (11)
55–64	19 (32)
≥65	17 (28)
MDD severity	
Mild	6 (10)
Moderate	40 (67)
Severe	14 (23)

EA, ethnographic analysis; HCP, healthcare professional; MDD, major depressive disorder.

- The specific term “anhedonia” was used very rarely across all data analyzed. Only 1 HCP used the term “anhedonia” a single time across two transcripts (EA and IA). There was no recorded instance of a patient using the term. The term “anhedonic” does not appear at all
- No single keyword was highly correlated with anhedonia discussion. Instead, the EA identified 4 patient and 4 HCP keyword domains associated with anhedonia discussion
- Patients used keywords in domains including lack of volition for generic activity, fatigue/energy, social disconnectedness, and lack of appropriate emotion
 - Rather than using a term or set of terms, patients used a set of four combined keyword domains to convey a lack of volition for generic activity (**Figure 1**)

Figure 1: Four combined meanings used by patients to convey lack of volition for generic activity

(Negative)	+	Volition)	+	(Generic)	+	Activity)
<i>disinterested // nothing // nowhere // don't even // don't ever // haven't // literally can't // just can't // lost // lack of // was not // rather than // just not there // never // not as interested // not wanting // too much // unmotivated // used to</i>		<i>don't want // don't feel like // don't like to // not interested // can't get into it // there's no enthusiasm // don't care // rather be // no interest in // not thrilled // interest me // seemed worthwhile // [no] reason to</i>		<i>do something // do anything // do things // do stuff // do nothing // do shit // do much // go anywhere // get stuff done // be around anybody</i>		<i>do physical activity // get out of the house // go to work // get up and do anything // go anywhere // get going // get out of bed // lay around // lay on the couch // get around to // sit around // stay in bed // go outside // keep myself busy</i>

Alternative sentence structures:

I just didn't want to do anything // just nothing seemed worthwhile // I don't do anything . I just lay on the couch // I don't really feel like doing much // I just have no interest in doing anything // I don't care if I go anywhere or if I stay at home // Sometimes things just seem like too much trouble // I don't have the desire to get up and do anything // Things that I normally do just didn't seem appealing // Just wanting to stay home and not...do anything //

- Conversations about anhedonia were introduced by patients (**Figure 2**) in 28/47 (60%) of cases
- The four HCP keyword domains that were identified in the dialogues were 1) interest, activity or hobbies, 2) energy, 3) sleep, and 4) social relations (**Table 2**)
 - While HCP and patient keyword domains overlapped in the areas of lack of energy/motivation, they were misaligned in other domains
 - HCP assessment questions (all disciplines including psychiatrists) were often misaligned with patients' own descriptions of anhedonia

Figure 2: How anhedonia was introduced into the discussion between HCPs and patients (N=47)

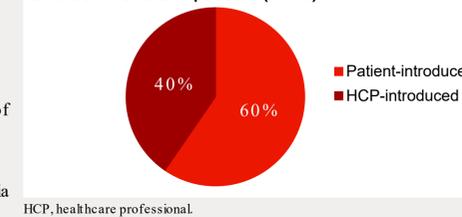


Table 2: Anhedonia keyword domains identified from questions HCPs asked their patients in routine clinical assessments in the EA sample

Topics	#	Keywords	Verbatims
Interest/activity/hobby	18	interest, hobby, fun, enjoy, activities	<i>Less interest in activities? ...The Bingo doesn't interest you anymore? // What did you say your, your hobby is? // What you been doing for fun? // Did you enjoy for the trip that you went on for the birthday? // And the things that give you pleasure don't give you pleasure anymore? // What kind of activities do you particularly like to do?</i>
Energy	13	energy, energy level, tired, fatigue	<i>No energy? // You don't feel like going or you don't have the energy or you just feel nervous about the environment? // What's your energy level been like? // And you're tired all the time?</i>
Sleep	13	sleep, sleeping, bed	<i>You're sleeping okay? // What about your sleep pattern, do you find yourself sleeping too much or not sleeping enough or? // What time do you go to bed? // Are you able to get out of bed in the morning? //</i>
Social relations	12	socialize, withdraw, friend, [family member nouns]	<i>So you want to be by yourself, you don't want to be socializing or meeting anybody? // More withdrawn? // Do you see any of your friends? // You have no real good, close friends within the residence? // How do you and your grandson get along? // Is [NAME OTHER] going to be visiting you through this thing? Is he going to be able to come and see you?</i>

EA, ethnographic analysis; HCP, healthcare professional.

References:

1. American Psychiatric Association (APA) (2013). Diagnostic and Statistical Manual of Mental Disorders—DSM-5™ (fifth ed.). Arlington, VA: APA. 2. World Health Organization. ICD-10 (F32-F39). Available at: <https://icd.who.int/browse10/2016/en#/F30-F39> (accessed May 2024). 3. Basson R, Gilks T. *Women's Health*. 2018;14:1745-5065/18762664. 4. McMakin D, et al. *J Am Acad Child Adolesc Psychiatry*. 2012;51(4):411-5. 5. Kasimussen AL, et al. *Transl Psychiatry*. 2023;13:247. 6. Romera I, et al. *BMC Psychiatry*. 2013;13:51. 7. Vinckler F, et al. *Eur Psychiatry*. 2017;44:1-8. 8. Vireze E, et al. *Biol Psychiatry*. 2013;73:639-645. 9. Whittton AE, Pizzagalli DA. *Curr Topics Behav Neurosci*. 2022;8:111-28. 10. Hymes D. (1968). The ethnography of speaking. Readings in the sociology of language, edited by Joshua Fishman, Berlin, Boston: De Gruyter Mouton, pp. 99-138. 11. Sacks H, et al. *Language*. 1974;50(4):696-735. 12. Jurafsky, D., & Martin, J. (2020). *Speech and language processing: An introduction to natural language processing, computational linguistics, and speech recognition* (3rd ed.). Stanford University. 13. Stefanowitsch, Anatol. (2020). *Corpus Linguistics: A guide to the methodology*. Berlin: Language Science Press.

Conclusions

- The term “anhedonia” is infrequently used by patients to articulate their symptoms
- Marked discrepancies exist in the articulation of anhedonia between HCPs and patients
 - As a result, HCPs may not recognize anhedonia reports without targeted probing questions
 - At present, the responsibility to raise the topic may fall disproportionately on patients
 - Nurse practitioners and other HCPs should be cognizant of this and adopt proactive listening strategies to identify alternative keywords that patients may use to convey anhedonia
- This approach has the potential to enhance the detection and management of anhedonia in routine clinical practice

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Disclosures

HK and TD are employees of Janssen Scientific Affairs, LLC and stockholders of Johnson & Johnson, Inc. CC has been an advisor to AbbVie, Acadia, Alkermes, Axsome, Biogen, Bristol Myers Squibb, Corium, Idorsia, Intra-Cellular, Johnson & Johnson, Karuna, Lundbeck, Moderna, Neurocrine, Noven, Otsuka, Sage, Sumitomo and Teva, a consultant to AbbVie, Acadia, Alkermes, Axsome, Biogen, Boehringer Ingelheim, Corium, Intra-Cellular, Johnson & Johnson, Karuna, Lundbeck, MedinCell, Moderna, Neurocrine, Noven, Otsuka, Sage, Sumitomo, Supernus and Teva, has had research/grant support from Acadia, Axsome, Harmony, Neurocrine, Teva and has been a speaker for AbbVie, Acadia, Alkermes, Axsome, Bristol Myers Squibb, Corium, Intra-Cellular, Johnson & Johnson, Karuna, Lundbeck, Merck, Neurocrine, Noven, Otsuka, Sumitomo, Teva. CC's spouse has been an advisor for Karuna and Otsuka.

Previous Presentation

This poster was previously presented at Psych Congress Elevate, May 30-June 2, 2024, Las Vegas, Nevada; the 2024 Association of Nurse Practitioners®(AANP) National Conference, June 25-30, 2024, Nashville, Tennessee; the American Psychiatric Nurses Association (APNA) 38th Annual Conference, October 9-12, 2024, Louisville, Kentucky and Psych Congress, October 29-November 2, 2024, Boston, Massachusetts.

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