Wiesław Jerzy Cubała<sup>1</sup>, Katarzyna Alicja Milska-Musa<sup>2</sup>, Jerzy Landowski<sup>1</sup>, Mariusz Stanisław Wiglusz<sup>1</sup>, Adam Włodarczyk<sup>1</sup>, Joanna Szarmach<sup>1</sup>, Janusz Springer<sup>3</sup>, Jakub Słupski<sup>1</sup>

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# Polish-language adaptation of the Oxford Depression Questionnaire (ODQ)

Polska adaptacja Oksfordzkiego Kwestionariusza Depresji (ODQ)

<sup>1</sup> Division of Psychiatry, Faculty of Medicine, Medical University of Gdańsk, Gdańsk, Poland

<sup>2</sup> Division of Quality of Life Research, Department of Psychology, Faculty of Health Sciences with the Institute of Maritime and Tropical Medicine, Medical University of Gdańsk, Gdańsk, Poland <sup>3</sup> Division of Preventive Medicine and Education, Faculty of Medicine, Medical University of Gdańsk, Gdańsk, Poland

Correspondence: Katarzyna Alicja Milska-Musa, Ph.D., Division of Quality of Life Research, Department of Psychology, Faculty of Health Sciences with the Institute of Maritime and Tropical Medicine, Medical University of Gdańsk, Tuwima 15, 80-210 Gdańsk, Poland, tel.: +48 58 349 15 55, e-mail: katarzyna.milska-musa@gumed.edu.pl

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#### ORCID iDs

 1. Wiesław Jerzy Cubała
 https://orcid.org/0000-0001-6343-8454

 2. Katarzyna Alicja Milska-Musa
 https://orcid.org/0000-0001-5120-4191

 3. Mariusz Stanisław Wiglusz
 https://orcid.org/0000-0001-5183-5954

 4. Adam Włodarczyk
 https://orcid.org/0000-0001-8549-254X

5. Joanna Szarmachhttps://6. Janusz Springerhttps://7. Jakub Słupskihttps:///or

https://orcid.org/0000-0002-7645-4821 https://orcid.org/0000-0002-4232-6557 https://orcid.org/0000-0002-4579-0208

Abstract Emotional disorders associated with antidepressant treatment (e.g. anhedonia and emotional blunting) are significant clinical and research concerns which influence treatment effectiveness and patients' quality of life. Nearly one-third of patients treated with antidepressants report experiencing apathy, with approximately 8% describing it as moderate to severe. Similarly, about 40% report a loss of motivation, with 12% characterising this symptom as moderate or severe. The Oxford Depression Questionnaire (ODQ) is a standardised tool developed to assess the severity, differentiation, and duration of emotional disorders related to the use of selective serotonin reuptake inhibitors (SSRI) antidepressants, distinguishing them from core depressive symptoms, such as anhedonia. The ODQ consists of 26 items divided into three sections, assessing weekly emotional experiences, changes compared to before the illness, and the influence of antidepressants on emotional functioning. This study presents the Polish-language adaptation of the ODQ, deemed appropriate for both clinical and research purposes, providing a robust tool for assessing SSRI-induced emotional changes and aiding in differential diagnosis and treatment planning.

Keywords: Oxford Depression Questionnaire (ODQ), SSRI-induced indifference, emotional blunting, affective disorders, drugs/medication, psychometrics

Streszczenie

Zaburzenia emocjonalne związane z leczeniem przeciwdepresyjnym (np. anhedonia i stępienie emocjonalne) stanowią istotny problem kliniczny i badawczy, który wpływa na skuteczność leczenia oraz jakość życia pacjentów. Prawie jedna trzecia pacjentów leczonych lekami przeciwdepresyjnymi zgłasza występowanie apatii, przy czym około 8% opisuje jej nasilenie jako umiarkowane do ciężkiego. Podobnie około 40% zgłasza utratę motywacji, przy czym 12% charakteryzuje ten objaw jako umiarkowany lub ciężki. Oksfordzki Kwestionariusz Depresji (Oxford Depression Questionnaire, ODQ) to standaryzowane narzędzie opracowane w celu oceny nasilenia, zróżnicowania i czasu trwania zaburzeń emocjonalnych związanych ze stosowaniem leków przeciwdepresyjnych, takich jak anhedonia. ODQ składa się z 26 pozycji podzielonych na trzy sekcje, oceniających cotygodniowe doświadczenia emocjonalne, zmiany w porównaniu z okresem sprzed choroby oraz wpływ leków przeciwdepresyjnych na funkcjonowanie emocjonalne. W niniejszym badaniu przedstawiono polską adaptację ODQ, która jest uznawana za odpowiednią zarówno do celów klinicznych, jak i badawczych oraz solidne narzędzie do oceny zmian emocjonalnych wywołanych przez selektywne inhibitory zwrotnego wychwytu serotoniny, odraz planowanie leczenia.

Słowa kluczowe: Oksfordzki Kwestionariusz Depresji (ODQ), SSRI-induced indifference, stępienie emocjonalne, zaburzenia afektywne, leki, psychometria

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## INTRODUCTION

ffective disorders associated with antidepressant treatment constitute a significant clinical and research problem. Although little is known about their aetiology, some patients report them as an adverse effect of their treatment for depression (Barnhart et al., 2004; Sansone and Sansone, 2010). According to the literature, nearly one-third of patients treated with antidepressants report apathy, of whom nearly 8% consider it moderate or severe. Loss of motivation was reported by 40% of the respondents, of whom 12% characterised this symptom as moderate or severe (Fava et al., 2006). Due to the widespread use of selective serotonin reuptake inhibitors (SSRIs), it is important to assess the emotional disorders that occur during treatment for depression using this and other classes of antidepressants. In addition to the qualitative (clinical) assessment of the particular emotional disorder, it seems justified to use standardised tools to aid in differential diagnosis by formally evaluating its duration and severity (Sansone and Sansone, 2010).

In this study, we aimed to present the Polish-language version of the Oxford Depression Questionnaire (ODQ) with instructions for its use and interpretation of the results. The Polishlanguage version of the ODQ (translation with the consent of the copyright holder) was prepared using the "back-translation" methodology with the participation of two translators, including one bilingual, according to the methodology recommended by the International Society for Pharmacoeconomics and Outcomes Research (ISPOR), and approved by regulatory agencies such as the U.S. Food and Drug Administration and the European Medicines Agency. Thus, statistical analysis for coherence and validity do not apply.

## EMOTIONAL DISORDERS ASSOCIATED WITH ANTIDEPRESSANT USE

Emotional blunting (EB), which affects both positive and negative emotions, may occur in the course of treatment with SSRI antidepressants. Although similar to the axis criteria of depression, the symptoms of antidepressant-associated EB may be experienced differently. Some patients report being able to differentiate symptoms typical of a depressive episode, such as the reduction of positive and negative emotions or emotional distance, from those that are qualitatively different, caused by an antidepressant during remission (Siwek, 2017). The occurrence of anhedonia and changes in its severity constitute significant predictors of the prescribed antidepressant's effectiveness. Antidepressant-associated emotional disorders may impair the patient's functioning, potentially resulting in treatment discontinuation (Cowen et al., 2013; Padala et al., 2012). These patients report a less intense emotional life, which can lead to a reduced quality of life (Siwek, 2017). The potential consequences of the above-described phenomena suggest the need for further research to increase treatment effectiveness.

Antidepressant-associated emotional disorders typically involve behavioural and emotional symptoms. Anhedonia and reduced motivation are the most commonly described behavioural symptoms. It is noteworthy that these symptoms cannot result from altered mental status, cognitive disorders, or emotional distress (Sansone and Sansone, 2010). This phenomenon is referred to in the literature as "amotivational syndrome", "apathy syndrome", "SSRI-induced apathy syndrome", "SSRI-induced apathy", and "antidepressant apathy syndrome (AAS)" (Sansone and Sansone, 2010). When describing the emotional component of antidepressant-associated emotional disorders, authors most frequently mention emotional indifference. Although various descriptions can be found in the literature, the understanding of this phenomenon seems to be similar and consistent (Opbroek et al., 2002; Price and Goodwin, 2009; Sansone and Sansone, 2010). Depending on the situation, emotional indifference might be perceived by the patient as an advantage (e.g. in situations where maintaining a "poker face" is beneficial) or as a burden (e.g. interfering with the ability to react appropriately to a stimulus or situation, such as during a funeral) (Sansone and Sansone, 2010).

# **REDUCED AFFECT DISPLAY**

Although the phenomenon of reduced affect display was first described in the literature nearly 20 years ago, little is known about it, and further study is needed on this subject (Cowen et al., 2013). Reduced affect display is sometimes defined as EB, referring to the disrupted expression of emotions (Price et al., 2012). It seems relevant to distinguish EB from other disturbances in this dimension. In addition to reduced affect display, the literature mentions flat affect and restricted affect (Rosenblat et al., 2019). The former describes a situation when a person does not demonstrate any emotions, while the latter refers to a "slightly restrained expression". EB falls between flat affect and restricted affect, with the assumption that these disturbances are defined by their severity (Goodwin et al., 2017). The phenomenon described in this article refers to EB which may appear in the course of treatment with SSRI antidepressants (Goodwin et al., 2017). It is worth mentioning that EB is a state with a typically slow and gradual onset and is completely reversible through SSRI dose reduction or discontinuation (Sansone and Sansone, 2010). Some patients treated with SSRIs report improvements in their mental state, although some also report difficulty expressing emotions, which may impair their daily functioning (Goodwin et al., 2017). Specifically, they describe having a preserved ability to feel particular emotions but significant difficulty expressing them, i.e. a feeling of having "emotions trapped inside" their bodies (Sansone and Sansone, 2010). Increasing frustration with this adverse effect may be a significant barrier hindering patient compliance with SSRI treatment (Goodwin et al., 2017).

It is worth noting that serotonin-norepinephrine reuptake inhibitors (SNRIs), another class of antidepressants, are also known to cause EB. SNRIs (e.g. venlafaxine and duloxetine) inhibit the reuptake of both serotonin and norepinephrine. This dual mechanism not only helps in alleviating depressive symptoms but also has a similar potential to induce EB. The emotional adverse effects of SNRIs may be attributed to their effect on both neurotransmitters, which can alter emotional processing and expression, mirroring those seen with SSRIs (Christensen et al., 2022). There are also other classes of antidepressants, such as monoamine oxidase inhibitors (MAOIs) and atypical antidepressants (e.g. bupropion, mirtazapine). While MAOIs are less commonly prescribed due to dietary restrictions and adverse effect profiles, they remain relevant in treatment-resistant cases. Atypical antidepressants primarily inhibit dopamine and norepinephrine reuptake, have a different adverse effect profile, thus offering an alternative treatment option for patients experiencing this side effect with SSRIs or SNRIs (Christensen et al., 2022).

## THE ODQ INSTRUMENT

Developed by Guy Goodwin and Jonathan Price at the University of Oxford's Department of Psychiatry, the ODQ facilitates the assessment of emotional disorders associated with the use of SSRI antidepressants, both in terms of their severity and duration (Price et al., 2012). The authors believed that existing instruments used to assess EB were not carefully designed and/or not validated. This tool was designed, written, tested, and validated according to best practices. The draft questionnaire was developed from patient-derived qualitative data, refined through cognitive interviewing, and administered at three intervals (weeks 0, 1, and 4) to patients taking antidepressants. Statistical methods were applied to shorten the questionnaire and assess its performance (Price et al., 2012). Details on the design, testing, and validation of the ODQ are available from the University of Oxford at: https://innovation.ox.ac.uk/outcomemeasures/the-oxford-depression-questionnaire-odq/.

The ODQ is helpful in differentiating between symptoms of depression and those caused by antidepressant adverse effects, enabling clinicians to make informed decisions on treatment adjustments, such as dosage changes or medication switches. Additionally, the ODQ is widely used in research to quantify EB and other emotional adverse effects, providing a standardised tool for comparing the impact of various antidepressants across different populations (Chen et al., 2022; Fagiolini et al., 2021; Henriksson et al., 2023; Kato et al., 2023). For example, Fagiolini et al. (2021) used the ODQ to assess the severity of EB in a study of the efficacy of vortioxetine treatment in patients with major depressive disorder (MDD) who had only partially responded to short-term treatment with SSRIs/SNRIs. Kato et al. (2023) employed the ODQ in a 24-week observational study of Japanese outpatients with MDD who had been initiated on vortioxetine. The utility of the ODQ was also noted in a study of Swedish patients with diagnosed depressive disorders treated with SSRIs, SNRIs, tricyclic antidepressants,

and other classes of antidepressants (Henriksson et al., 2023). Chinese researchers used the ODQ in a study of 312 patients diagnosed with major depression and treated with antidepressants for at least two weeks (Chen et al., 2022). The validation of the ODQ in multiple languages and cultural contexts underscores its versatility and reliability. Notably, foundational studies by Goodwin and Price have demonstrated the ODQ's high sensitivity, reliability, and construct validity, solidifying its role as a robust tool in psychopharmacology research. Furthermore, the ODQ offers distinct advantages over other assessment tools, such as the Oxford Questionnaire on the Emotional Side-effects of Antidepressants (OQuESA), due to its multidimensional approach and sensitivity to changes in emotional state. This makes it an essential instrument for both clinicians and researchers in understanding and managing the emotional adverse effects of antidepressants.

As described by its authors, the ODQ covers four dimensions derived from qualitative research (patient-reported outcomes, PRO):

- not caring (NC);
- emotional detachment (ED);
- positive reduction (PR);
- general reduction (GR).

The three sections of the ODQ are:

- section 1:
  - 12 items total (three items from each of the four dimensions (NC, ED, PR, and GR),
  - the recall period is the previous week;
- section 2:
  - eight items (two from each of the four dimensions),
  - comparison of the respondent's experiences during the previous week with before they developed their illness/ problem;
- section 3:
  - six items,
  - to be completed by respondents who are currently treated with antidepressants,
  - assesses to what extent the respondent attributes their emotional difficulties to the antidepressant and considers them "emotional side-effects",
  - also assesses the potential influence of emotional adverse effects on compliance with antidepressant treatment.

Responses are recorded on a 5-point Likert scale, with a score applied to each response. The ODQ results can be calculated for individual dimensions or as a total score. An additional dimension ("antidepressant as cause – AC") can also be scored, if necessary. Detailed instructions on how to score the responses and handle missing data are provided with the ODQ use license.

The ODQ can be used:

- as a clinical tool, to facilitate the identification of patients with EB;
- in research studies, to advance understanding of the nature, causes, and particularly the treatment of this phenomenon.

Based on results obtained during its development, the following are some of the advantages of the ODQ:

Acceptability

The questionnaire had an exceptionally high completion rate, with 96% of respondents completing it on three separate occasions (weeks 0, 1 and 4).

Validity

The ODQ demonstrates high construct validity. The items included in the ODQ closely align with those in other instruments that assess EB, such as OQuESA (Goodwin et al., 2017; Price et al., 2012).

• Sensitivity to change

When compared to a "gold standard" question, the ODQ appears to be sensitive to change. The "gold standard" question addresses the participant's experience of emotional adverse effects: "During the last week, to what extent have you been experiencing emotional adverse effects of your antidepressant?". The response options are: "not at all", "insignificantly", "mildly", "moderately" or "severely") (Price et al., 2012).

• Reliability

The ODQ has high internal reliability (strong correlation between the items within each dimension) and high testretest reliability.

# INSTRUCTIONS

The ODQ can be used by researchers as an inventory to assess the respondent's self-esteem or as a structured interview in which the assessment is conducted by a specialist. The instructions for respondents consist of questions which, depending on the ODQ section, address experiences in the past week (section 1), comparing his/her experiences from the previous week with those before the illness (section 2) and the influence of antidepressants on emotional functioning (section 3).

The four dimensions are calculated by summing the scores obtained for the individual items:

- GR = General reduction in emotions = 1 + 5 + 9 + 13 + 17;
- RP = Reduction in positive emotions = 2 + 6 + 10 + 14 + 18;
- ED = Emotional detachment from others = 3 + 7 + 11 + 15 + 19;
- NC = Not caring = 4 + 8 + 12 + 16 + 20.

If needed, an additional dimension can be scored:

• AC = Antidepressant as cause = 21 + 22 + 23 + 24 + 25 + 26. Missing data may be attributed based on the collected responses. The total score is the sum of the results obtained across the four basic dimensions:

• **Total** = GR + RP + ED + NC.

# **SUBTOTALS**

Validation data suggest that two of the four dimensions (RP and NC) may be closely associated with depression and the phenomenon of antidepressant-associated EB, whereas the two remaining dimensions (GR and ED) show a weaker

association with depression. It is therefore recommended that the following two sub-totals be calculated:

- RP-NC = RP + NC;
- GR-ED = GR + ED.

# **RECOMMENDATIONS FOR CLINICIANS**

Patient monitoring is critical during treatment with antidepressants and when deciding to discontinue it. The ODQ facilitates the quantitative assessment of emotional disorders in the course of treatment with antidepressants and assist in decisions to modify treatment (e.g. dose reduction, switching to a different SSRI, or replacing the SSRI with a drug from another class) (Sansone and Sansone, 2010).

Given its high validity and reliability, the ODQ is a promising research tool. Its additional advantages include ease of use and the possibility to assess a wide spectrum of dimensions. By being alert and sensitive to patients' responses on the ODQ, clinicians can reduce adverse reactions to SSRIs and improve patients' quality of life (Goodwin et al., 2017). However, as with all questionnaires, the ODQ has a fundamental disadvantage: self-reporting. Therefore, clinicians and researchers need to take into consideration all the factors that can interfere with the validity and reliability of obtained results (so-called 'noise').

## **MAIN POINTS**

- The ODQ allows the assessment of emotional disorders associated with the use of SSRI antidepressants.
- While the ODQ is presented as a tool specifically designed to assess emotional disorders associated with SSRI use, its application could be broader. We propose that the ODQ might also be useful in evaluating emotional adverse effects in patients taking other types of antidepressants. This would extend the utility of the ODQ beyond its current scope, supporting its use in a wider range of clinical scenarios.
- The application of the ODQ in psychopharmacology enables the differentiation of symptoms of emotional disorders occurring during treatment from anhedonia, one of the core symptoms characteristic of a depressive episode.
- Results obtained using a standardised tool such as the ODQ allow for comparison with data published in the literature.

## **Conflict of interest**

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The Polish-language adaptation is available through Oxford University Innovation Limited (https://innovation.ox.ac.uk/).

## Author contribution

Original concept of study; collection, recording and/or compilation of data; analysis and interpretation of data; writing of manuscript; critical review of manuscript; final approval of manuscript: WJC, KAMM, JL, MSW, AW, JSz, JSp, JSł.

#### References

- Barnhart WJ, Makela EH, Latocha MJ: SSRI-induced apathy syndrome: a clinical review. J Psychiatr Pract 2004; 10: 196–199.
- Chen J, Chen W, Zhang H et al.: Reliability and validity of the Chinese version of the Oxford Depression Questionnaire (ODQ-Chinese). J Affect Disord 2022; 313: 278–282.
- Christensen MC, Ren H, Fagiolini A: Emotional blunting in patients with depression. Part I: clinical characteristics. Ann Gen Psychiatry 2022; 21: 10.
- Cowen PJ, Sharp T, Lau JYF (eds.): Behavioral Neurobiology of Depression and Its Treatment. Springer, Berlin/Heidelberg 2013.
- Fagiolini A, Florea I, Loft H et al.: Effectiveness of vortioxetine on emotional blunting in patients with major depressive disorder with inadequate response to SSRI/SNRI treatment. J Affect Disord 2021; 283: 472–479.
- Fava M, Graves LM, Benazzi F et al.: A cross-sectional study of the prevalence of cognitive and physical symptoms during long-term antidepressant treatment. J Clin Psychiatry 2006; 67: 1754–1759.
- Goodwin GM, Price J, De Bodinat C et al.: Emotional blunting with antidepressant treatments: a survey among depressed patients. J Affect Disord 2017; 221: 31–35.
- Henriksson E, Fredell P, Sand P et al.: Assessing emotional blunting in a psychiatric population: psychometric properties of the Swedish version of the Oxford Depression Questionnaire. J Affect Disord Rep 2023; 14: 100614.
- Kato M, Kikuchi T, Watanabe K et al.: Assessing reliability and validity of the Oxford Depression Questionnaire (ODQ) in a Japanese clinical population. Neuropsychiatr Dis Treat 2023; 19: 2401–2412.
- Opbroek A, Delgado PL, Laukes C et al.: Emotional blunting associated with SSRI-induced sexual dysfunction. Do SSRIs inhibit emotional responses? Int J Neuropsychopharmacol 2002; 5: 147–151.
- Padala PR, Padala KP, Monga V et al.: Reversal of SSRI-associated apathy syndrome by discontinuation of therapy. Ann Pharmacother 2012; 46: e8.
- Price J, Goodwin GM: Emotional blunting or reduced reactivity following remission of major depression. Medicographia 2009; 31: 152–156.
- Price J, Cole V, Doll H et al.: The Oxford Questionnaire on the Emotional Side-effects of Antidepressants (OQUESA): development, validity, reliability and sensitivity to change. J Affect Disord 2012; 140: 66–74.
- Rosenblat JD, Simon GE, Sachs GS et al.: Treatment effectiveness and tolerability outcomes that are most important to individuals with bipolar and unipolar depression. J Affect Disord 2019; 243: 116–120.
- Sansone RA, Sansone LA: SSRI-induced indifference. Psychiatry (Edgmont) 2010; 7: 14–18.
- Siwek M: Anhedonia w zaburzeniach depresyjnych. Psychiatr Psychol Klin 2017; 17: 216–224.