



REVIEW ARTICLE

Personality disorders in a non-Western context: A comprehensive meta-analysis of personality disorder prevalence in Türkiye

Dilara Nihal Carikci Ozgul^{1,2}, Ozden Yalcinkaya Alkar²

¹Mehmet Akif Ersoy University, Rectorate, Burdur, Türkiye

²Ankara Yıldırım Beyazıt University, Faculty of Humanities and Social Sciences, Department of Psychology, Ankara, Türkiye

ABSTRACT

Personality disorders (PDs) are severe mental health conditions associated with significant distress and functional impairment. However, the epidemiology of personality disorders in non-Western populations is underrepresented. This meta-analysis aimed to estimate the prevalence of any personality disorder in both clinical and community samples in Türkiye. A systematic search was conducted in Web of Science, PubMed, Scopus, TRDizin, and the Turkish Psychiatry Index. The meta-analysis was performed in RStudio following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. A total of 49 articles, comprising 61 independent samples and 28,269 participants, were included. The pooled prevalence of any personality disorder across all samples was 26.06% (95% confidence interval (CI) [0.1870, 0.3507]). The pooled prevalence was 30.60% (95% CI [0.2049, 0.4301]) in clinical samples and 15.94% (95% CI [0.1063, 0.2322]) in community samples. The findings indicate that PDs are highly prevalent in both clinical and community settings. These results suggest that PDs represent a substantial public health concern and should not be considered solely within clinical populations.

Keywords: Personality disorders, prevalence, epidemiology, meta-analysis, Türkiye

INTRODUCTION

According to a comprehensive review, the prevalence of any personality disorder (PD) ranges from approximately 2% to 20% in the general population, whereas prevalence estimates in clinical samples are substantially higher, ranging from 40% to 90% in Europe and from 45% to 50% in the United States (1, 2). Gawda reported an overall prevalence of approximately 10% for any PD in community samples (1). In Türkiye, the average prevalence of any

PD diagnosis among psychiatric patients has been reported to be 52% (3). Worldwide, the prevalence of PDs in the general population is estimated to be approximately 9–10% (4, 5). A notable disparity in prevalence estimates has been reported across Asian countries. For example, prevalence was estimated at 2% in India and 60% in Pakistan, (2) highlighting potential cultural differences in the diagnosis and classification of PDs. Despite growing interest in cross-cultural psychiatry, the epidemiology of PDs in non-Western populations remains underrepresented,

How to cite this article: Carikci Ozgul DN, Yalcinkaya Alkar O. Personality disorders in a non-Western context: A comprehensive meta-analysis of personality disorder prevalence in Türkiye. Dusunen Adam J Psychiatr Neurol Sci 2026;39:251-260.

Correspondence: Dilara Nihal Carikci Ozgul, Mehmet Akif Ersoy University, Rectorate, Burdur, Türkiye

E-mail: dncozgul@mehmetakif.edu.tr

Received: March 24, 2026; **Revised:** May 21, 2026; **Accepted:** July 06, 2026



partly because of differences in cultural norms, stigma, and help-seeking behaviors. The presentation and prevalence of PDs vary across cultures, suggesting that cultural factors influence both symptom expression and diagnostic practices. For example, histrionic PD may be overdiagnosed in South American and Mediterranean cultures, where expressive emotional behavior is more culturally normative despite overlapping with diagnostic criteria (1). Conversely, obsessive-compulsive personality disorder (OCPD) has been reported to be more prevalent in Asian countries than in the United States (6). OCPD is the most commonly diagnosed PD in the United States and Australia, avoidant PD in Norway, and schizotypal PD in Iceland (7). One epidemiological study (8) reported that the prevalence of paranoid, schizoid, schizotypal, antisocial, and dependent PDs each ranged from approximately 0.5% to 1% in the general adult population. In a Turkish psychiatric sample, the prevalence of borderline PD (BPD) was 10.2%, followed by histrionic PD (5%), antisocial PD (ASPD; 3.8%), and narcissistic PD (0.95%) (9).

Studies examining psychiatric comorbidity consistently demonstrate a strong association between PDs and other mental disorders, with approximately 45% of psychiatric patients meeting criteria for at least one PD (8, 10, 11). The most common comorbid conditions include mood disorders among individuals with avoidant and dependent PDs, anxiety disorders among those with BPD, substance use disorders (SUDs) among individuals with schizotypal and borderline PDs, and eating disorders among those with histrionic and borderline PDs (12).

One study found that approximately 25% of individuals with SUD met criteria for BPD (11). PDs have been diagnosed in 44% of individuals with alcohol use disorders and in 79% of those with other substance use disorders (13). Similarly, Bowden-Jones et al. (14) reported prevalence rates of 53% among individuals with alcohol use disorders and 37% among those with substance use disorders. Although many individuals initially seek psychological treatment for substance-related problems, PDs are highly prevalent in this population (15).

Despite the growing body of research on PDs across diverse populations and cultural contexts, studies specifically estimating prevalence remain limited. Accurate prevalence estimates are important because PDs represent a significant public health concern due to their high rates of psychiatric comorbidity and their pervasive impact on multiple domains of functioning

(15–17). Although research on PDs has primarily been conducted in clinical settings, community-based studies remain relatively scarce and are often limited by methodological weaknesses or insufficient sample representativeness (18). Furthermore, the considerable variability in prevalence estimates across studies underscores the importance of examining potential moderators, such as age, sample size, and year of publication.

The present meta-analysis aimed to estimate the prevalence of PDs in Türkiye. Specifically, we estimated the prevalence of any PD and individual PD categories separately in clinical and community samples. The following research questions were addressed:

1. What is the overall prevalence of any PD in Türkiye?
2. What is the prevalence of any PD in community-based samples in Türkiye?
3. What is the prevalence of any PD in clinical samples in Türkiye?
4. What are the prevalence estimates for individual PD categories in Türkiye?
5. Do prevalence estimates for any PD differ across psychiatric comorbidity subgroups?

METHODS

Search Strategy and Eligibility Criteria

This meta-analysis was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Appendix 1) (19, 20). The literature search was performed between February 21 and March 19, 2024, using the Web of Science (WoS), PubMed, Scopus, TRDizin, and Turkish Psychiatry Index databases. The search strategy was designed to maximize sensitivity and capture all relevant studies. The core search term personality disorder was combined with a wildcard (personality disorder*) to identify plural forms and other lexical variations. In WoS, Scopus, and PubMed, the additional search terms Turkey, Turkish, or Türkiye were included. For the Turkish databases, the equivalent wildcard term kişilik bozuk* was used to capture variations in Turkish terminology. Searches in TRDizin and the Turkish Psychiatry Index were conducted using both English and Turkish search terms. Studies were eligible for inclusion if they (a) reported prevalence data for any PD, (b) employed a cross-sectional or longitudinal design, (c) included Turkish adolescents or adults residing in Türkiye (minimum age: 12 years), (d) were published in Turkish or English, and (e) appeared in peer-reviewed journals. Studies were excluded if they

(a) included fewer than 20 participants, (b) focused on highly specific populations (e.g., patients with neurological disorders), (c) were books, review articles, or conference abstracts, or (d) were unavailable in full text. No lower publication year limit was applied. All eligible studies published up to the final search date (March 19, 2024) were considered to ensure comprehensive coverage of the literature. Although the search period extended through 2024, the eligible studies were published between 1996 and 2022.

Study Selection Process

The initial database search identified 1,034 records (WoS: 305, PubMed: 36, Scopus: 436, Turkish Psychiatry Index: 19, and TRDizin: 238). After screening according to the eligibility criteria, 49 articles comprising 61 independent samples were included in the meta-analysis. The study selection process is illustrated in Figure 1, and the characteristics of the included studies are summarized in Appendix 2.

Quality Appraisal and Statistical Analysis

The methodological quality of the included studies was assessed using the Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Studies Reporting Prevalence Data (21). Each item was scored as 1 ("yes") or 0 ("no" or "unclear"). All included studies achieved a quality score of 6 or higher. All statistical analyses were conducted in RStudio using the metafor and meta packages (22–24). Given the substantial variability across studies in terms of methodology, sampling procedures, diagnostic criteria, inclusion and exclusion criteria, and study populations, pooled prevalence estimates were calculated using a random-effects model with restricted maximum likelihood (REML) estimation (25). In proportional meta-analyses, when study proportions deviate substantially from 0.5 and approach either 0 or 1, statistical challenges arise because these extreme values can receive disproportionate weight in the analysis (26). For this reason, transformation of the effect size estimates is recommended. Although no consensus exists regarding the optimal transformation method, the generalized linear mixed model (GLMM) has been recommended because of its robust statistical performance (27). The GLMM, which assumes a binomial distribution, was implemented in R. Accordingly, the meta-analysis was conducted using a GLMM with a logit transformation.

The prevalence of any PD was estimated for the overall sample and separately for the clinical and community samples. Subgroup analyses were

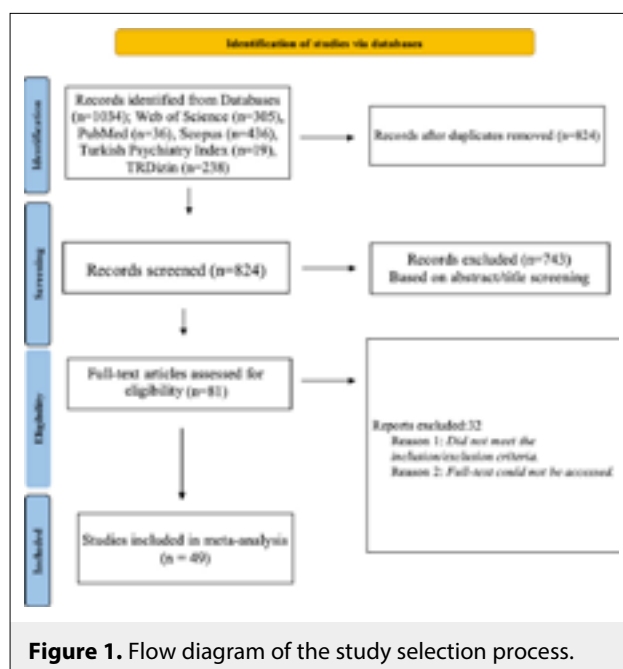


Figure 1. Flow diagram of the study selection process.

also conducted to estimate the prevalence of PDs among participants with specific psychiatric comorbidities, including bipolar disorder, substance use disorder, attention-deficit/hyperactivity disorder (ADHD), obsessive-compulsive disorder (OCD), and schizophrenia. In addition, pooled prevalence estimates were calculated for each specific PD diagnosis. In proportional meta-analyses, substantial heterogeneity is generally expected because of inherent differences in study populations, settings, and measurement methods (28). Heterogeneity was assessed using Cochran's Q test and the I^2 statistic, which quantify the extent of variability among studies beyond that expected by chance (29). To examine whether the observed heterogeneity was attributable to combining clinical and community samples in a single analysis, subgroup analyses and meta-regression analyses were conducted. Traditional methods for assessing publication bias are generally considered inappropriate for proportional meta-analyses and have been criticized in this context (30). Therefore, publication bias was not formally assessed in the present review.

RESULTS

Study Characteristics

A total of 61 samples from 49 studies comprising 28,269 participants, were included in the meta-analysis. Although passive-aggressive and self-defeating personality disorders (PDs) are not included

in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM), these diagnoses were retained because most of the included studies used DSM-III-R criteria. Comorbid diagnostic categories represented by fewer than three samples were excluded from subgroup analyses. The included studies were published between 1996 and 2022. The Structured Clinical Interview for DSM Axis II Personality Disorders (SCID-II) was the most commonly used structured diagnostic interview, whereas one study used the DSM-IV and ICD-10 Personality Questionnaire (DIP-Q) (31, 32).

The included studies comprised both clinical ($n=25,065$) and community ($n=2,894$) samples. Participants ranged in age from 15 to 80 years, and mean ages across studies ranged from 21.4 to 46.3 years (Appendix 2). Clinical samples consisted of psychiatric outpatients and inpatients with a variety of diagnoses. Community samples predominantly included university students, adults from the general population, pregnant women or mothers of infants, and members of several occupational groups. The inclusion criteria varied substantially according to the primary aim of each study. For example, alcohol dependence was an inclusion criterion in studies focusing on substance use disorders. Accordingly, participants were recruited from clinical or community settings appropriate to the objectives of the individual studies. Retrospective studies based on hospital records were also included. Forensic cases derived from forensic hospital records were categorized as clinical samples. All included studies assessed PDs through interviews conducted by psychiatrists. Sex distributions and age-related eligibility criteria varied according to the aims of the individual studies. Detailed study characteristics are presented in Appendix 2.

Pooled Prevalence of Personality Disorders

A total of 61 samples were analyzed to estimate the pooled prevalence of any PD in Türkiye (Appendix 3). In clinical samples, the pooled prevalence of any PD was 30.60% (95% confidence interval (CI) [0.2049, 0.4301]; $I^2=98.2\%$, $Q=2393.16$, $p<0.001$). In community samples, the pooled prevalence was 15.94% (95% CI [0.1063, 0.2322]; $I^2=93\%$, $Q=215.45$, $p<0.05$). Across all samples, the pooled prevalence of any PD was 26.06% (95% CI [0.1870, 0.3507]; $I^2=97.8\%$, $Q=6247.72$, $p<0.001$). The difference in prevalence between clinical and community samples was statistically significant ($p<0.05$).

Pooled prevalence and heterogeneity estimates for individual PD diagnoses were calculated across 36

samples. The pooled prevalence of paranoid PD was 3.58% (95% CI [0.0185, 0.0680]; $I^2=79.9\%$, $Q=173.82$, $p<0.01$). The prevalence of schizoid PD was 0.23% (95% CI [0.0005, 0.0105]; $I^2=75.9\%$, $Q=132.70$, $p<0.01$), and prevalence of schizotypal PD was 2% (95% CI [0.0106, 0.0303]; $I^2=79\%$, $Q=152.5403$, $p<0.01$). The pooled prevalence of ASPD was 1.08% (95% CI [0.0032, 0.0353]; $I^2=81\%$, $Q=184.51$, $p<0.01$). BPD had pooled prevalence of 5.65% (95% CI [0.0342, 0.0920]; $I^2=83\%$, $Q=206.27$, $p<0.01$), whereas the prevalence of histrionic PD was 2.48% (95% CI [0.0130, 0.0466]; $I^2=76.2\%$, $Q=134.70$, $p<0.01$). The pooled prevalence of narcissistic PD was 0.9% (95% CI [0.0017, 0.0215]; $I^2=86.8\%$, $Q=243.04$, $p<0.01$). Avoidant personality disorder (AvPD) had a pooled prevalence of 7.51% (95% CI [0.0496, 0.1121]; $I^2=88.6\%$, $Q=332.30$, $p<0.01$). The prevalence of dependent PD was 2.92% (95% CI [0.0187, 0.0452]; $I^2=3.4\%$, $Q=63.55$, $p<0.01$). The pooled prevalence of OCPD was 8.66% (95% CI [0.0576, 0.1281]; $I^2=85.2\%$, $Q=250.80$, $p<0.01$). The prevalence of passive-aggressive PD was 3.45% (95% CI [0.0212, 0.0556]; $I^2=77.1\%$, $Q=130.99$, $p<0.01$), and the prevalence of self-defeating PD was 1.18% (95% CI [0.0029, 0.0465]; $I^2=69.9\%$, $Q=29.89$, $p<0.01$).

Subgroup Analysis

A sufficient number of samples was available to conduct subgroup analyses by psychiatric comorbidity only for the prevalence of any PD ($n=53$). Across these samples, the pooled prevalence of any PD among participants with comorbid psychiatric disorders was 22.70% (95% CI [0.1556, 0.3187]; $I^2=97.8\%$, $Q=2327.84$, $p<0.001$) (Appendix 4). When the subgroups were examined, heterogeneity was low for the OCD subgroup ($I^2=20.6\%$, $Q=5.04$, $p=0.28$) and the schizophrenia subgroup ($I^2=0\%$, $Q=1.19$, $p=0.55$). In contrast, heterogeneity was substantial in the bipolar disorder ($I^2=97.5\%$, $Q=121.76$, $p<0.01$), SUD ($I^2=94.5\%$, $Q=201.68$, $p<0.01$), suicide attempt ($I^2=98.8\%$, $Q=255.05$, $p<0.01$), and ADHD ($I^2=89\%$, $Q=18.17$, $p<0.01$). The pooled prevalence of any PD was 8.25% in the bipolar disorder subgroup (95% CI [0.0263, 0.2304]), 41.38% in the SUD subgroup (95% CI [0.2989, 0.5389]), 47.53% in the suicide attempt subgroup (95% CI [0.1347, 0.8405]), 46.75% in the OCD subgroup (95% CI [0.3967, 0.5396]), 27.74% in the ADHD subgroup (95% CI [0.0804, 0.6276]), and 73.55% in the schizophrenia subgroup (95% CI [0.6605, 0.7989]). The differences in prevalence across psychiatric comorbidity subgroups were statistically significant ($p<0.001$).

Meta-Regression Analyses

Meta-regression analyses were conducted to investigate potential sources of overall heterogeneity. Mean age did not significantly explain the observed heterogeneity ($Q=1.2900$, $df=1$, $p=0.2561$). Publication year also did not have a statistically significant effect ($Q=3.3032$, $df=1$, $p=0.0691$). In contrast, sample size significantly explained variation across samples ($Q=18.6159$, $df=1$, $p<0.001$).

DISCUSSION

This meta-analysis synthesized data from 61 samples comprising 28,269 participants. The overall pooled prevalence of any PD was 26.06%. It is important to emphasize that the reported prevalence of 26.06% does not represent the prevalence of personality disorders in the general population of Türkiye. Rather, it reflects the pooled prevalence across both community and clinical samples included in this meta-analysis. Nevertheless, the estimate exceeds the DSM-5 general-population prevalence estimate of 9.1% (4). In contrast to Lenzenweger (16), the discrepancy between prevalence estimates may suggest that DSM-based figures underestimate the true burden of personality disorders. However, this interpretation cannot be confirmed without evidence that the included studies were methodologically rigorous and representative of the underlying population.

High heterogeneity observed across all included studies ($I^2=98.2\%$) may reflect methodological differences among the studies. A qualitative synthesis showed that most studies used the SCID-II as the diagnostic instrument and DSM-III-R as the diagnostic criteria. Although the studies contributing to the high heterogeneity were not methodologically identical, the variation in prevalence estimates is unlikely to be explained solely by methodological differences related to sample representativeness. To explore potential sources of heterogeneity, three separate meta-regression analyses were conducted. Mean age was not significantly associated with heterogeneity in the overall meta-analysis. The publication year also did not reach statistical significance, although the result approached the conventional threshold ($Q=3.3032$, $p=0.0691$), suggesting that temporal changes over the approximately 25-year study period may warrant further investigation. Sample size, however, significantly explained variation across studies ($Q=18.6159$, $p<0.001$). In large prevalence meta-analyses, the I^2 statistic may be inflated because

large total sample sizes reduce within-study sampling error ($n=28,269$). Accordingly, the high heterogeneity observed in this review should not be interpreted solely as evidence of methodological weakness. It may also reflect genuine clinical variability arising from the inclusion of general-population cohorts and participants with diverse psychiatric conditions. Despite this heterogeneity, the present review provides the first comprehensive synthesis of PD prevalence across clinical and community samples in Türkiye.

The observed variation in prevalence estimates across studies is consistent with Gawda's assertion that the prevalence of personality disorders differs across cultural contexts (1). The reported prevalence of personality disorders in the general population ranges from 2% to 20% across the United States, Africa, Europe, Asia, and Australia (1, 33, 34). The pooled prevalence of 26.06% observed in the present meta-analysis appears to be slightly higher than this reported range. This finding may suggest that personality disorders are more prevalent in Türkiye; however, such an interpretation should be made cautiously because of substantial methodological and cultural differences across studies. The relatively high prevalence observed in Türkiye may also be influenced by the diagnostic criteria used, particularly given the limited number of personality disorder studies conducted in the country. Clemente et al. (6) reported that DSM-III criteria yielded lower diagnostic rates than other diagnostic systems. The high pooled prevalence is particularly noteworthy, given that most included studies used DSM-III or DSM-III-R diagnostic criteria. This finding highlights the need to consider the potential for overdiagnosis when interpreting prevalence estimates.

A systematic review of general-population studies in Western countries reported an overall PD prevalence of approximately 9% (35). These lower prevalence estimates appear inconsistent with concerns that studies using DSM-III-R may overdiagnose personality disorders. According to a global meta-analysis (36), the worldwide prevalence of personality disorders typically ranges from 5% to 10%. The findings of the present meta-analysis suggest that the prevalence of personality disorders in Türkiye may be higher than the global estimate. Therefore, additional methodologically homogeneous studies are needed to determine whether the prevalence of personality disorders in Türkiye is truly higher than that reported in other populations.

Fewer community samples were available than clinical samples. Globally, prevalence studies are conducted less frequently in community populations than in clinical samples (18). The pooled prevalence of any personality disorder in community samples was 15.94%, which was lower than that observed in clinical samples. A meta-analysis of community-based studies reported a prevalence of 7.8% (36), whereas another review estimated the prevalence at 10% (1). These findings suggest that prevalence estimates from Turkish community samples may be slightly higher than those reported in the international literature. The results also indicate that the prevalence of any PD varies according to sample characteristics. The prevalence of any PD was significantly higher in clinical samples than in community samples. However, because relatively few meta-analyses have examined prevalence across both clinical and community populations, direct comparisons remain limited. This underscores the contribution of the present study to a more integrated understanding of PD prevalence. According to a previous meta-analysis of individuals with psychiatric diagnoses in Türkiye, the prevalence of any PD was 52% (3). In the present meta-analysis, the pooled prevalence of any PD among comorbid diagnostic groups was 22.70% across 53 samples. Several methodological differences may explain this discrepancy. Most notably, Dereboy et al. (3) included only studies that used the SCID-II, whereas the present review also included studies that used other validated assessment instruments. Additionally, the inclusion and exclusion criteria were broader in the present meta-analysis. Consequently, the greater methodological diversity likely contributed to the relatively high heterogeneity observed. The broader scope of this review also allowed the inclusion of a more diverse range of samples, which may have contributed to the differences in PD prevalence estimates compared with the previous meta-analysis. The divergence between the findings of these two meta-analyses, conducted within a relatively short period in the same country, underscores the need for further research.

According to the findings, the highest prevalence of any PD was observed in the schizophrenia subgroup (73.55%), whereas the lowest prevalence was found in the suicide attempt subgroup (7.53%). The comparatively low prevalence in the suicide attempt subgroup may reflect cultural factors related to mental health, such as accessibility to services and stigma. Heterogeneity was low in the schizophrenia subgroup, suggesting that the findings were relatively

consistent across studies. Given the high prevalence of PDs in this subgroup, these findings underscore the importance of routinely screening individuals with schizophrenia for comorbid PDs. Furthermore, previous evidence suggests that not only individuals with schizophrenia but also their relatives are at increased risk of PDs (4). Overall, the prevalence of any PD differed significantly across comorbid diagnostic subgroups ($p < 0.0001$), indicating that individuals with schizophrenia were more likely to have a comorbid PD than those with a history of suicide attempts or the other comorbid conditions examined in this review.

The prevalence of 12 personality disorder diagnostic categories was examined in the clinical, community, and total samples. In the total sample, schizoid PD had the lowest prevalence (0.23%), whereas OCPD had the highest prevalence (8.66%). For all PD diagnoses that could be compared across clinical and community samples, prevalence was consistently lower in community samples than in clinical samples. Because the prevalence of schizotypal PD could only be estimated for the total sample, it could not be included in this comparison. Overall, heterogeneity tended to be lower in community samples than in clinical samples. Within the clinical sample, schizoid PD had the lowest prevalence (0.49%), whereas ASPD had the lowest prevalence in the community sample (0.15%). The prevalence of schizoid personality disorder in the total sample was also comparable to that of ASPD (0.19%).

Among the personality disorders most frequently reported in the literature are AVPD and BPD (7, 16). In the present meta-analysis, OCPD had the highest prevalence, followed by AVPD (7.51%) and BPD (5.65%). In a previous study conducted in Türkiye, the prevalence of BPD in a psychiatric sample was reported to be 10.2% (9). In the present review, conducted 27 years later, the prevalence of BPD in clinical samples was 9.86%. The prevalence of BPD appears to have remained relatively stable over time in both clinical and general populations. The slight difference between the two estimates may reflect changes in diagnostic practices or shifts in population characteristics over time. The prevalence of BPD observed in the present review (9.86%) is also very close to, although slightly lower than, the DSM-5 estimate for clinical populations (10%) (5). Overall, the prevalence of individual PD diagnostic categories ranged from 0.19% to 11.9%. Because PDs are chronic conditions that adversely affect multiple domains of functioning, they represent not only an individual clinical concern but also an important public health issue.

High heterogeneity was observed in many analyses, which is expected in proportional meta-analyses because of the inherent variability among prevalence studies. Although this review adhered to the PRISMA guidelines, the study protocol was not prospectively registered in a public registry such as PROSPERO. The absence of prospective registration represents a limitation in terms of review transparency. However, to minimize the risk of post hoc analytical decisions and selective reporting, all eligibility criteria, quality appraisal procedures, and statistical analysis plans were established before data extraction and implemented without deviation. Despite an extensive database search, no specific efforts were made to identify unpublished studies. Publication bias was not assessed because conventional methods for evaluating publication bias are not considered appropriate for proportional meta-analyses, as described in the Methods section. This represents a limitation of the present review. However, to minimize the risk of bias, a standardized study quality appraisal tool was applied, and no substantial methodological concerns were identified. Another limitation is that the literature search was restricted to Web of Science, PubMed, Scopus, TRDizin, and the Turkish Psychiatry Index. Comprehensive repositories of academic dissertations, such as the Turkish Higher Education Council National Thesis Center and ProQuest, were not searched. The exclusion of these sources represents a methodological limitation, as it may have resulted in the omission of relevant local research, including unpublished master's and doctoral dissertations, thereby increasing the risk of publication bias. Consequently, the pooled prevalence estimates may be slightly inflated if studies reporting non-significant or null findings were less likely to be published in peer-reviewed journals. Although the primary objectives of the included studies varied, all were retained because they reported valid prevalence estimates for PDs. Another methodological limitation relates to the search strategy. The literature search relied primarily on the term personality disorder*, without explicitly incorporating the names of individual PD subtypes (e.g., borderline personality disorder, antisocial personality disorder, narcissistic personality disorder, or obsessive-compulsive personality disorder) or relevant diagnostic codes. Although subsequent sensitivity searches using subtype-specific keywords did not identify any additional eligible studies, this search strategy may nevertheless have introduced a theoretical risk of selection bias. In particular, this approach may have excluded regional publications

that focused exclusively on a single personality disorder subtype without indexing or referencing the broader term personality disorder in the title, abstract, or keywords. Nevertheless, the primary objective of this review was to estimate the prevalence of any PD. Another important limitation concerns the demographic composition of the included samples. Because community samples were not fully representative of the broader Turkish population, the estimated community prevalence (16%) may not be generalizable to older adults, rural populations, or other underrepresented groups. Finally, difficulties were encountered when transforming the data for schizotypal personality disorder, preventing separate subgroup analyses for clinical and community samples. As specified in the predefined eligibility criteria, only studies reporting the prevalence of any PD were included. Future systematic reviews and meta-analyses focusing on individual PD diagnoses may provide more robust prevalence estimates for schizotypal personality disorder.

CONCLUSION

Determining the prevalence of personality disorders is important because of their chronic and pervasive nature. As PDs are typically diagnosed using diagnostic manuals and assessment instruments developed in Western cultural contexts, questions remain regarding their cross-cultural applicability. In addition, individual prevalence studies are often limited by issues of representativeness. Consequently, proportional meta-analyses provide an important means of synthesizing the available evidence. The findings of this meta-analysis suggest that the overall pooled prevalence of PDs in Türkiye (26.06%) is relatively high compared with estimates reported in the literature. When examined by sample type, the prevalence was higher in clinical samples (30.60%), as expected given patterns of help-seeking behavior. However, the prevalence observed in community samples (15.94%) also appears higher than that reported in previous studies of non-clinical populations. This finding suggests that PDs represent a significant public health concern and should not be considered solely within clinical settings. Furthermore, high rates of PD comorbidity were observed in specific diagnostic groups, particularly among individuals with schizophrenia, OCD, and SUD. Although the existing literature indicates that personality disorders are highly prevalent, further prevalence studies and meta-analyses are needed to strengthen the evidence base.

Online Appendices Files: <https://dusunenadamdergisi.org/storage/upload/files/1787827400-appendix-en.pdf>

Ethical Approval: Ethical approval was not required because this study is a meta-analysis using only data from previously published studies.

Conflict of Interest: The authors declare that there is no conflict of interest.

Financial Disclosure: The authors declared that this study has received no financial support.

Use of AI for Writing Assistance: The authors declared that artificial intelligence was not used in the study.

Contribution Categories		Author Initials
Category 1	Concept/Design	D.N.C.O., O.Y.A.
	Data acquisition	D.N.C.O.
	Data analysis/Interpretation	D.N.C.O.
Category 2	Drafting manuscript	D.N.C.O.
	Critical revision of manuscript	O.Y.A.
Category 3	Final approval and accountability	D.N.C.O., O.Y.A.
Other	Technical or material support	D.N.C.O.
	Supervision	O.Y.A.

Peer-review: Externally peer-reviewed.

REFERENCES

- Gawda, B. Cross-cultural studies on the prevalence of personality disorders. *Current Issues in Personality Psychology* 2018; 6:318-329. [CrossRef]
- Beckwith H, Moran PF, Reilly J. Personality disorder prevalence in psychiatric outpatients: a systematic literature review. *Personal Ment Health* 2014; 8:91-101. [CrossRef]
- Dereboy F, Dereboy Ç, Başaran SK, Dallioğlu ÇK, Kunt DA. Prevalence of Personality Disorder Diagnosed with SCID-II Among Psychiatry Patients in Turkey: Systematic Review and Meta-Analysis. *Turkish Journal of Psychiatry* 2022; 33:118-132. [CrossRef]
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-5-TR. 5th ed., text rev. Washington (DC): American Psychiatric Association Publishing; 2022. Available at: <https://psychiatry.org/psychiatrists/practice/dsm/about-dsm>. Accessed July 20, 2026.
- World Health Organization. International statistical classification of diseases and related health problems (10th revision, Volume 2: Instruction manual, Sixth edition). Available at: <https://icd.who.int/browse10/2019/en>. Accessed July 20, 2026.
- Clemente MJ, Martins Silva AS, Pozzolo Pedro MO, Paiva HS, de Azevedo Marques Périco C, Torales J, et al. A meta-analysis and meta-regression analysis of the global prevalence of obsessive-compulsive personality disorder. *Heliyon* 2022; 8:e09912. [CrossRef]
- Sansone RA, Sansone LA. Personality disorders: a nation-based perspective on prevalence. *Innov Clin Neurosci* 2011; 8:13-18.
- Jackson HJ, Burgess PM. Personality disorders in the community: results from the Australian National Survey of Mental Health and Well-being Part III. Relationships between specific type of personality disorder, Axis I mental disorders and physical conditions with disability and health consultations. *Soc Psychiatry Psychiatr Epidemiol* 2004; 39:765-776. [CrossRef]
- Senol S, Dereboy C, Yüksel N. Borderline disorder in Turkey: a 2- to 4-year follow-up. *Soc Psychiatry Psychiatr Epidemiol* 1997; 32:109-112. [CrossRef]
- Zimmerman M, Rothschild L, Chelminski I. The prevalence of DSM-IV personality disorders in psychiatric outpatients. *Am J Psychiatry* 2005; 162:1911-1918. [CrossRef]
- Trull TJ, Freeman LK, Vebares TJ, Choate AM, Helle AC, Wycoff AM. Borderline personality disorder and substance use disorders: an updated review. *Borderline Personal Disord Emot Dysregul* 2018; 5:15. [CrossRef]
- Oldham JM, Skodol AE, Kellman HD, Hyler SE, Doidge N, Rosnick L, et al. Comorbidity of axis I and axis II disorders. *Am J Psychiatry* 1995; 152:571-578. [CrossRef]
- Verheul, R, van den Brink, W, Hartgers, C. Prevalence of personality disorders among alcoholics and drug addicts: an overview. *European Addiction Research* 1995; 1:166-177. [CrossRef]
- Bowden-Jones O, Iqbal MZ, Tyrer P, Seivewright N, Cooper S, Judd A, et al. Prevalence of personality disorder in alcohol and drug services and associated comorbidity. *Addiction* 2004; 99:1306-1314. [CrossRef]
- Torgersen S. The nature (and nurture) of personality disorders. *Scand J Psychol* 2009; 50:624-632. [CrossRef]
- Lenzenweger MF. Epidemiology of personality disorders. *Psychiatr Clin North Am.* 2008; 31:395-403. [CrossRef]
- Paris J. Estimating the prevalence of personality disorders in the community. *J Pers Disord* 2010; 24:405-411. [CrossRef]
- Samuels J. Personality disorders: epidemiology and public health issues. *Int Rev Psychiatry* 2011; 23:223-233. [CrossRef]
- Page MJ, Moher D, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews. *BMJ* 2021; 372:n160. [CrossRef]
- Moher D, Liberati A, Tetzlaff J, Altman DG; PRISMA Group. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *PLoS Med* 2009;6:e1000097. [CrossRef]
- Munn Z, Moola S, Lisy K, Riitano D, Tufanaru C. Methodological guidance for systematic reviews of observational epidemiological studies reporting prevalence and cumulative incidence data. *Int J Evid Based Healthc* 2015; 13:147-153. [CrossRef]
- Viechtbauer W. Conducting Meta-Analysis in R with the 'metaphor' Package. *Journal of Statistical Software* 2010; 36: 1-48. [CrossRef]
- RStudio Team. RStudio: Integrated Development Environment for R. RStudio, PBC. 2020. <https://www.rstudio.com/>. Accessed July 20, 2026.

24. Schwarzer, G, Cheung, MWL, Rucker, G. Meta-Analysis with R. Springer. 2015. <https://cran.r-project.org/web/packages/meta/meta.pdf>. Accessed July 20, 2026.
25. Borenstein M, Hedges LV, Higgins JPT, Rothstein HR. Introduction to meta-analysis. 2nd ed. Hoboken (NJ): John Wiley & Sons; 2021. [CrossRef]
26. Barendregt JJ, Doi SA, Lee YY, Norman RE, Vos T. Meta-analysis of prevalence. *J Epidemiol Community Health* 2013; 67:974-978. [CrossRef]
27. Evangelou E, Veroniki AA, editors. Meta-research: methods and protocols. New York (NY): Humana Press; 2022. [CrossRef]
28. Migliavaca CB, Stein C, Colpani V, Barker TH, Ziegelmann PK, Munn Z, et al. Meta-analysis of prevalence: I² statistic and how to deal with heterogeneity. *Res Synth Methods* 2022; 13:363-367. [CrossRef]
29. Higgins JP, Thompson SG. Quantifying heterogeneity in a meta-analysis. *Stat Med* 2002; 21:1539-1558. [CrossRef]
30. Borenstein, M. Common mistakes in meta-analysis and how to avoid them. Biostat 2019. Available at: <https://meta-analysis-workshops.com/download/commonmistakes.pdf>. Accessed July 20, 2026.
31. Kaya V, Uguz F, Sahingoz M, Gezginc K. Pregnancy-onset obsessive-compulsive disorder: clinical features, comorbidity, and associated factors. *Bulletin of Clinical Psychopharmacology* 2015; 25:248-258. [CrossRef]
32. Spitzer RL, Williams JBW, Gibbon M, First MB. Structured Clinical Interview for DSM-III-R Axis II Disorders (SCID-II). Washington (DC): American Psychiatric Association; 1990.
33. Pedersen L, Simonsen E. Incidence and prevalence rates of personality disorders in Denmark-A register study. *Nord J Psychiatry* 2014; 68:543-548. [CrossRef]
34. Newton-Howes G, Cunningham R, Atkinson J. Personality disorder prevalence and correlates in a whole of nation dataset. *Soc Psychiatry Psychiatr Epidemiol* 2021; 56:679-685. [CrossRef]
35. Volkert J, Gablonski TC, Rabung S. Prevalence of personality disorders in the general adult population in Western countries: systematic review and meta-analysis. *Br J Psychiatry* 2018; 213:709-715. [CrossRef]
36. Winsper C, Bilgin A, Thompson A, Marwaha S, Chanen AM, Singh SP, et al. The prevalence of personality disorders in the community: a global systematic review and meta-analysis. *Br J Psychiatry* 2020; 216:69-78. [CrossRef]
37. Akman C, Uguz F, Kaya N. Postpartum-onset major depression is associated with personality disorders. *Compr Psychiatry* 2007; 48:343-347. [CrossRef]
38. Akyunus M, Gençöz T. The distinctive associations of interpersonal problems with personality beliefs within the framework of cognitive theory of personality disorders. *Journal of Rational-Emotive & Cognitive-Behavior Therapy* 2020; 38: 26-43. [CrossRef]
39. Alpak G, Selek S, Bulut M, Bulbul F, Unal A, Virit O, et al. High catalase and low thiol levels in adult-ADHD patients. *Bulletin of Clinical Psychopharmacology* 2014; 24:128-134. [CrossRef]
40. Altunsoy N, Şahiner ŞY, Cingi Külük M, Okay T, Ulusoy Kaymak S, Aydemir Ç, et al. Premorbid personality disorders in male schizophrenic patients with or without comorbid substance use disorder: is dual diagnosis mediated by personality disorder? *Noro Psikiyatr Ars* 2015; 52:303-308. [CrossRef]
41. Arslantaş, H, Erkayran, O, Dereboy, Ç, Eskin, M, Dereboy, F. Kişilik bozukluğunda cinsel fiziksel istismar: Menderes kişilik bozukluğu araştırma sonuçları. *Klinik Psikiyatri Dergisi* 2019; 22:157-168. [Article in Turkish]
42. Asoglu M, Fedai U, Celik H, Karababa IF, Kati M, Kivrak Y, et al. Retrospective evaluation of 30,000 patients admitted to a psychiatry clinic of a state hospital in Turkey. *Int J Clin Exp Med* 2016; 9:14612-14619.
43. Ateşçi FÇ, Kuloğlu M, Tezcan E, Yıldız M. İntihar girişimi olan bireylerde birinci ve ikinci eksen tanıları. *Klinik Psikiyatri* 2002; 5:22-27. [Article in Turkish]
44. Belli H, Belli S, Ural C, Akbudak M, Oktay ME, Akyuz Cim EF, et al. Psychopathology and psychiatric co-morbidities in patients seeking rhinoplasty for cosmetic reasons. *West Indian Med J* 2013; 62:481-486. [CrossRef]
45. Berkol TD, İslam S, Kırılı E, Pınarbaşı R, Özyıldırım İ. Suicide attempts and clinical features of bipolar patients. *Saudi Med J* 2016; 37:662-667. [CrossRef]
46. Besiroglu L, Uguz F, Saglam M, Agargun MY, Cilli AS. Factors associated with major depressive disorder occurring after the onset of obsessive-compulsive disorder. *J Affect Disord* 2007; 102:73-79. [CrossRef]
47. Uguz F, Askin R, Agargün MY, Besiroglu L, Saglam M, Yilmaz E. Obsesif kompulsif bozuklukta yaşam kalitesi ile ilişkili etkenler/ Factors associated with quality of life in obsessive compulsive disorder. *Anadolu Psikiyatri Dergisi* 2007; 8:5-13.
48. Bilici M, Kesebir S, Özkorumak E, Yanartaş Ö, İsitmez S. Türkiye’de bipolar bozukluğun ele alınmasında pratik uygulamalar ve hasta özelliklerinin kesitsel incelenmesi. *Anatolian Journal of Psychiatry* 2014; 15:304-312. [CrossRef]
49. Bilici R, Yazici E, Tufan AE, Mutlu E, İzci F, Uğurlu GK. Motivation for treatment in patients with substance use disorder: personal volunteering versus legal/familial enforcement. *Neuropsychiatr Dis Treat* 2014; 10:1599-1604. [CrossRef]
50. Durmaz Y, İlhanlı İ, Durmaz P. Evaluation of personality disorders using the structured clinical interview for DSM-5 personality disorders, quality of life, and disease activity in patients with systemic lupus erythematosus. *Arch Rheumatol* 2022; 37:326-334. [CrossRef]
51. Ergin A, Gürsu Hariri A, Uzuner Özer G, Ceylan ME, Ceylan N, Önal O. Şizofrenili hastaların birinci derece yakınlarında kişilik bozuklukları. *Klinik Psikofarmakoloji Bülteni* 2000; 10:189-193.
52. Evren EC, Eken B, Çakmak D. Alkol bağımlılarında aleksitimi ve depresyon, anksiyete ve kişilik bozuklukları ile ilişkisi. *Bagimlik Dergisi* 2003; 4:47-52.
53. Evren C, Kural S, Cakmak D. Clinical correlates of self-mutilation in Turkish male substance-dependent inpatients. *Psychopathology* 2006; 39:248-254. [CrossRef]

54. Gelegen V, Tamam L. Prevalence and clinical correlates of intermittent explosive disorder in Turkish psychiatric outpatients. *Comprehensive Psychiatry* 2018; 83:64-70. [CrossRef]
55. Geniş B, Coşar B, Arıkan Z. Psychiatric comorbidity, length of hospital stays and readmission rates in opiate addicts treated in inpatient service. *J Acad Res Med* 2021; 11:24-31. [CrossRef]
56. Gökalp PG, Tükel R, Solmaz D, Demir T, Kiziltan E, Demir D, et al. Clinical features and co-morbidity of social phobias in Turkey. *Eur Psychiatry* 2001; 16:115-121. [CrossRef]
57. Güler Ö, Kaya V, Gezginç K, Kayhan F, Çiçek E, Sönmez Ö, et al. Pregnancy-onset panic disorder: incidence, comorbidity and associated factors. *Noro Psikiyatr Ars* 2015; 52:216-220. [CrossRef]
58. Hocaoglu C, Kandemir G, Tiryaki A, Muratoglu H, Ak I. Evaluation of patients hospitalized at the psychiatry clinic of a training hospital over the last four years in Turkey. *Pakistan Journal of Medical Sciences* 2006; 22:60-63.
59. Ince A, Doğruer Z, Türkçapar H. Comparison of sociodemographic, clinic and psychopathologic features of the early and late onset alcohol dependent males. *Journal of Clinical Psychiatry* 2002; 5: 82-91.
60. Kara H, Yazıcı MK, Sayar MK, Ağargün MY, Verimli A. Obsesif Kompulsif bozuklukta kişilik bozuklukları. *Türk Psikiyatri Dergisi* 1997; 8:16-19.
61. Karşoğlu EH, Kaymak SU, Soygür H, Manisalı Erkek B, Koçbıyık S, Açikel CH, et al. Şizofreniye eşlik eden kişilik bozuklukları: 75 hastadan oluşan bir örneklemin analizi. *Klinik Psikofarmakoloji Bülteni* 2012; 22:59-70. [CrossRef]
62. Kavakci, O, Kugu, N, Semiz, M, Meydan, F, Karsikaya, S, Dogan, O. Prevalence of attention-deficit/hyperactivity disorder and co-morbid disorders among students of Cumhuriyet University. *Eur J Psychiatr* 2012; 26:107-117. [CrossRef]
63. Dereboy C, Güzel HS, Dereboy F, Okyay P, Eskin M. Personality disorders in a community sample in Turkey: prevalence, associated risk factors, temperament and character dimensions. *Int J Soc Psychiatry* 2014; 60:139-147. [CrossRef]
64. Kuloglu M, Atmaca M, Tezcan E, Gecici O, Bulut S. Sociodemographic and clinical characteristics of patients with conversion disorder in Eastern Turkey. *Soc Psychiatry Psychiatr Epidemiol* 2003; 38:88-93. [CrossRef]
65. Kural S, Evren C, Çakmak D. Alkol/madde bağımlılığında kişilik bozukluğu ek tanısının diğer 1. eksen tanıları ve çocukluk çağı kötüye kullanımı ve ihmali ile ilişkisi. *Bağımlılık Dergisi* 2005; 6:9-18.
66. Kurhan F, Kamis GZ, Atli A. Examining of the individuals who have attempted suicide in the east of Turkey in terms of psychological factors. *Eastern Journal of Medicine* 2021; 26:410-417. [CrossRef]
67. Kozak HH, Dünder MA, Uca AU, Uğuz F, Turgut K, Altaş M, et al. Anxiety, mood, and personality disorders in patients with benign paroxysmal positional vertigo. *Noro Psikiyatr Ars* 2018; 55:49-53.
68. Öner H, Tamam L, Levent B, Öner S. Alkol bağımlılığı olan yatan hastalarda eksen I ve eksen II eştanılarının değerlendirilmesi. *Clinical Psychopharmacology Bulletin* 2002; 12:14-22. [Article in Turkish]
69. Güleç Öyekçin D. Bir devlet hastanesi psikiyatri poliklinigine bir yıl içinde başvuran olguların sosyodemografik özellikleri ve psikiyatrik tanı dağılımı. *Anadolu Psikiyatri Dergisi* 2008; 9:39-43. [Article in Turkish]
70. Özçetin A, Maraş A, Ataoğlu A, İçmeli C. Deprem sonucu gelişen travma sonrası stres bozukluğu ile kişilik bozuklukları arasında ilişki. *Düzce Tıp Fakültesi Dergisi* 2008; 10:8-18. [Article in Turkish]
71. Sertöz ÖÖ, Doğanavşargil GÖ, Noyan MA, Altıntoprak E, Elbi H. Bir üniversite hastanesi konsültasyon liyezon servisinde psikiyatrik hastalıkların psikiyatri dışı hekimlerce doğru tanınma oranları. *Klinik Psikofarmakoloji Bülteni* 2008; 18:288-295.
72. Tan RE, Erim BR, Üstün N, Üney R. Effects of comorbid personality disorders in bipolar type I disorder patients to disease course. *Anadolu Psikiyatri Derg* 2019; 20:237-244. [CrossRef]
73. Taner E, Demir EY, Cosar B. Comparison of the effectiveness of reboxetine versus fluoxetine in patients with atypical depression: a single-blind, randomized clinical trial. *Adv Ther* 2006; 23:974-987. [CrossRef]
74. Erdoğan Taycan S, Çepik Kuruoğlu A. Evlilik uyumu ile bağlanma stilleri ve mizaç ve karakter özellikleri arasındaki ilişkilerin incelenmesi. *Türk Psikiyatri Dergisi* 2014; 25:9-18. [Article in Turkish]
75. Tezcan E, Ülkeröğlu F, Çulha F, Karabulut C. Panik bozukluk ve intihar. *Erciyes Medical Journal* 1996; 18:7-10.
76. Turkcapar H, Kose S, Ince A, Myrick H. Beliefs as a predictor of relapse in alcohol-dependent Turkish men. *Journal of Studies on Alcohol* 2005; 66:848-851. [CrossRef]
77. Uguz F, Akman C, Sahingoz M, Kaya N, Kucur R. One year follow-up of post-partum-onset depression: The role of depressive symptom severity and personality disorders. *Journal of Psychosomatic Obstetrics & Gynecology* 2009; 30:141-145. [CrossRef]
78. Uguz F, Çiçek E, Salli A, Karahan AY, Albayrak I, Kaya N, et al. Axis I and Axis II psychiatric disorders in patients with fibromyalgia. *Gen Hosp Psychiatry* 2010; 32:105-107. [CrossRef]
79. Yalvaç, HD, Kaya, B, Ünal, S. İntihar girişimi ile başvuran bireylerde kişilik bozukluğu ve bazı klinik değişkenler. *Alpha Psychiatry* 2014; 15:24-30. [Article in Turkish]
80. Yapıcıoğlu, B, Kavakci, O, Güler, A, Semiz, M, Doğan O. Sivas il merkezinde erişkin dikkat eksikliği hiperaktivite bozukluğunun yaygınlığı ve eşlik eden eksen-I, eksen-II tanıları. *Anadolu Psikiyatri Dergisi* 2011; 12:177-184. [Article in Turkish]
81. Yargıç İ, Ersoy E, Batmaz Oflaz S. UPPS Dürtüsel Davranış Ölçeği ile Psikiyatri Hastalarında Dürtüsellik Ölçümü. *Klinik Psikofarmakoloji Bülteni-Bulletin of Clinical Psychopharmacology* 2011; 21:139-146. [Article in Turkish] [CrossRef]
82. Kantaş Yılmaz F, Ergelen M, Bilici R, Akülker G. Alkol ve madde kullanım bozukluğu olan ebeveynlerin çocuklarında karşılaşılan davranış sorunları. *Bağımlılık Dergisi* 2021; 22:455-464. [CrossRef]
83. Yılmaz N, Kugu N, Kavakci O, Dogan O. Psychopathology and sociodemographic characteristics in suicide attempters: a single center study. *Cumhuriyet Medical Journal* 2018; 40:215-225. [CrossRef]
84. Yüncü Z, Kesebir S, Özbaran B, Çelik Y, Aydın C. Madde kullanım bozukluğu olan ergenlerin ebeveynlerinde psikopatoloji ve mizaç: Kontrollü bir çalışma. *Türk Psikiyatri Dergisi* 2009; 20:5-13. [Article in Turkish]