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CLINICAL AND SOCIAL FACTORS IN THE DEVELOPMENT OF THE STIGMA PHENOMENON IN DEPRESION

DOCTORAL PROGRAMME 321.06 – PSYCHIATRY AND NARCOLOGY

Abstract of the doctoral thesis in medical sciences

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The thesis was developed within the Department of Mental Health, Medical Psychology and Psychotherapy of "Nicolae Testemițanu" State University of Medicine and Pharmacy

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The public defense will take place on 29th of April 2026 at 15:00 at "Nicolae Testemițanu" State University of Medicine and Pharmacy, bd. Ștefan cel Mare și Sfânt, 165, office 204, during the meeting of the Public Defense Committee for the doctoral thesis, approved by the decision of the Scientific Council of the Consortium no. 76 of 12.11.2025.

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INTRODUCTION

General Context

Depression is a common mental disorder characterized by persistent sadness, loss of interest and pleasure in activities previously considered enjoyable, as well as decreased energy and motivation [1]. It can significantly impair an individual's functioning across multiple areas of life, including occupational performance, interpersonal relationships, and personal well-being. Beyond its severe clinical impact, individuals with depression often face a complex and harmful phenomenon: stigma [2].

Stigma Associated with Depression

Stigma manifests through negative attitudes, prejudice, and discrimination from society toward individuals diagnosed with depression [3]. These attitudes may be fueled by a lack of accurate information regarding the nature and causes of depression, as well as by myths and stereotypes prevalent in society [4]. For example, people with depression may be perceived as weak, unable to cope with life's challenges, or even dangerous. Such stigma can have serious consequences for affected individuals, leading them to conceal their symptoms, avoid seeking professional help, or experience discrimination in various social contexts, including employment and education [5]. Understanding the factors that contribute to the development of stigma among people with depression is essential for addressing this problem and improving their quality of life [6].

Relevance of the Topic

Depression represents a major global public health problem, affecting a substantial number of individuals and generating significant social and economic costs [7]. This disorder is characterized by persistent sadness, loss of interest in previously pleasurable activities, feelings of

guilt and worthlessness, sleep and appetite disturbances, difficulties in concentration, and even suicidal ideation [8]. The impact of depression is further amplified by the fact that many affected individuals do not seek professional diagnosis and treatment. This reluctance is largely attributable to the stigma associated with mental disorders, including depression [9].

Stigma acts as a significant barrier to accessing mental health services, causing individuals with depression to delay or completely avoid seeking professional help due to fear of negative labeling, discrimination, and social exclusion [10]. A substantial proportion of individuals with major depressive disorder (76%) report internalized stigma, which negatively affects self-esteem and treatment adherence [11]. Internalized stigma is associated with feelings of hopelessness and low self-esteem—features commonly observed among people with depression [12]. Moreover, individuals with depression often internalize society's negative perceptions, developing a diminished self-image accompanied by feelings of shame and guilt, which lead to social withdrawal and isolation. Depressed individuals frequently feel misunderstood by society, which contributes to guilt related to failing to meet social expectations and a desire to conceal their condition [13]. Cognitive processing of social feedback is often distorted, with individuals affected by depression rejecting positive feedback, thereby reinforcing negative self-perceptions [14].

Research indicates a direct correlation between negative self-image and increased severity of depressive symptoms, suggesting that self-perception plays a crucial role in mental health [15]. hus, negative self-image and internalized stigma significantly contribute to the worsening of depression and to difficulties in treatment adherence. These factors ultimately lead to challenges in maintaining employment, interpersonal relationships, and overall quality of life. Studies show that internalized stigma results in decreased self-esteem and hope—key factors for recovery and social integration. One study found that self-esteem and self-efficacy are predictive of internalized stigma, suggesting that improving these factors may enhance treatment adherence [16].

Internalized stigma is associated with a reduced quality of life, particularly in the psychological and social domains [17]. Among patients with depression, higher levels of stigma correlate with more severe symptoms and lower quality of life, underscoring the need for interventions targeting stigma reduction [18].

Although internalized stigma presents significant challenges, addressing it through targeted interventions can enhance self-esteem and treatment outcomes, thereby improving quality of life. However, some argue that the impact of stigma may vary across different mental health disorders, requiring tailored approaches for effective management [19]. Therefore, to effectively address depression at both individual and societal levels, it is essential to understand the factors contributing to the development and persistence of stigma associated with this disorder [20]. The proposed research is particularly relevant as it addresses a pressing public health issue and highlights the complex relationship between depression and stigma. The study provides an in-depth analysis of factors contributing to stigma in depression, including distinctions between personal stigma and perceived stigma [20].

It is essential to thoroughly examine both clinical factors—such as depression severity, with greater severity correlating with higher levels of stigma, [19,21] duration of symptoms, with longer symptom duration associated with greater internalized stigma [11] and comorbidities, where the presence of additional mental health conditions exacerbates experiences of stigmatization, [21] and social factors, including age and sex (older age and female sex are associated with higher perceived stigma), [11,19] educational level and socioeconomic status (higher education reduces internalized stigma, while low socioeconomic status may amplify stigmatization), [21] and lack of social support, which is a significant predictor of higher stigma levels, [19]. his comprehensive

approach allows for a better understanding of factors associated with depression-related stigma and enables more precise identification of vulnerabilities and barriers faced by individuals with depression in terms of treatment access and social integration [11].

The findings of this research may serve as a foundation for developing effective stigma-reduction strategies and facilitating access to mental health services for individuals affected by depression. In conclusion, the proposed study has the potential to generate positive change in the lives of people with depression by contributing to a deeper understanding of the disorder and fostering a more tolerant and inclusive social environment.

Research Aim

To analyze correlations between clinical and social factors and stigma in depression by assessing associations between depression severity and stigma levels, as well as correlations with sociodemographic factors, with the goal of developing educational strategies aimed at reducing stigmatization.

Research Objectives

1. To review the scientific literature in order to identify key concepts, theoretical models, and evidence regarding the relationship between depression and stigma.
2. To analyze associations between social and clinical factors (age, sex, education, socioeconomic status, comorbidities, social support) and levels of depression.
3. To analyze associations between social and clinical factors (age, sex, education, socioeconomic status, comorbidities, social support) and levels of stigma.
4. To compare personal stigma and perceived stigma in order to assess differences between these two forms of stigma among individuals with depression.
5. To analyze the correlation between depression severity and stigma levels among study participants.
6. To develop a set of educational materials based on the obtained data and facilitate their integration into university health-related curricula, with the aim of reducing stigma associated with depression.

Materials and methods. This study is a quantitative investigation conducted on a representative sample of participants with depression. Sociodemographic data (age, sex, educational level, employment status, etc.) and clinical data will be collected. Depression severity and stigma levels will be assessed using scientifically validated instruments, such as the Patient Health Questionnaire (PHQ-9) and the Depression Stigma Scale (DSS). Statistical analyses will be performed to examine correlations and differences between variables, as well as predictive models of stigma and depression.

The proposed research employs correlational and predictive statistical methods to analyze the complex relationship between depression and stigma, with a focus on the influence of clinical and social factors. Statistical analysis using SPSS version 24 will enable identification and quantification of correlations between depression severity (measured by PHQ-9), stigma levels (assessed using DSS), and various clinical and social factors (age, sex, education, socioeconomic status, social support). Econometric modeling will be used to generate predictions regarding the impact of identified factors on stigma levels, which may guide the development of targeted and effective interventions. The use of advanced statistical methods allows for a comprehensive analysis of the data, identifying trends relevant to understanding the relationship between depression, stigma, and associated factors.

The study was approved by the Ethics Committee of the Nicolae Testemițanu State University of Medicine and Pharmacy. All participants provided written informed consent prior to

inclusion in the study. Data were collected anonymously and stored in a secure database to ensure participant confidentiality.

Keywords: Depression, stigma, perceived stigma, personal stigma, mental health, social factors, clinical factors, social support.

MATERIALS AND METHODS

The present study is a cross-sectional, observational study aimed at analyzing the relationship between depression severity and depression-related stigma, as well as the influence of sociodemographic factors on levels of stigma and depression. The study was conducted over a 12-month period, during which data were collected from a representative sample of patients with depression. Participants were included through a screening process using the Patient Health Questionnaire-2 (PHQ-2). Individuals who obtained a clinically relevant score on the PHQ-2 were subsequently assessed using the Patient Health Questionnaire-9 (PHQ-9) to confirm the presence of depression and to determine its severity.

Table 1. Structured Methodology

Stage	Description
Study design	Cross-sectional, observational study
Study period	12 months
Participant selection	PHQ-2 screening, PHQ-9 confirmation
Assessment instruments	PHQ-9 for depression, DSS for stigma
Sample size	Calculated using Cochran's formula, 460 participants
Data collection	Face-to-face administered questionnaires
Data analysis	Pearson correlations, t-test, multiple regression
Ethical approval	Approved by the USMF Ethics Committee; informed consent obtained

The inclusion criteria were:

• A positive score on PHQ-2 screening, indicating the presence of depressive symptoms.

• Agreement to participate in the study by signing the informed consent form.

The exclusion criteria were:

• Presence of other severe psychotic or neurological disorders.

• Inability to complete the questionnaires due to cognitive or language barriers.

This approach allowed for the identification of participants with clinically relevant depressive symptoms without relying exclusively on a formal clinical diagnosis of depression.

For the calculation of the patient sample size, the following parameters were considered:

● Population size (N): Population of the Republic of Moldova

● Confidence level (Z): 95% (Z = 1.96)

● Margin of error (E): 0.05 (5%)

● Estimated proportion (p): 0.5 (assuming maximum variability)

The Cochran formula was used to calculate the sample size:

1. The initial sample size was calculated: 384.16
2. Adjustment for dropouts and practical constraints (20%): 384 × 1.2 = 460

Based on the sample size calculation, a total of 460 patients were required to ensure statistical validity.

Data were collected through face-to-face administered questionnaires. The questionnaires included assessments of depression severity and associated stigma, as well as relevant sociodemographic factors.

Depression severity was measured using the PHQ-9 questionnaire, a validated instrument for assessing depressive symptoms and their severity. PHQ-9 scores were used to classify participants according to depression severity (mild, moderate, severe).

The Depression Stigma Scale (DSS) was used in this study to assess levels of stigma associated with depression among participants. This scale measures both personal stigma and perceived stigma, providing a detailed perspective on how individuals view depression and how they perceive societal attitudes toward this condition.

The DSS consists of two main subscales: Personal stigma, which evaluates participants' personal attitudes and beliefs toward individuals with depression, reflecting individual stereotypes and prejudices related to depression; and Perceived stigma, which measures how participants believe society views individuals with depression.

Each item on the scale is rated on a Likert scale from 1 to 5, where 1 represents strong disagreement and 5 represents strong agreement. Items include statements such as "People with depression are weak" or "Most people would avoid associating with someone who has had depression."

DSS scores provide a comprehensive measure of stigmatization, allowing for comparative analysis of personal and perceived stigma. In this study, higher scores indicated more stigmatizing attitudes. In addition, the DSS was used to investigate the relationship between stigma and other clinical and social factors analyzed in the study, such as depression severity, social support, and level of education. Thus, this instrument contributed to a deeper understanding of how stigmatization influences the experiences of individuals with depressive symptoms and to the identification of future directions for stigma-reduction interventions.

Demographic and clinical factors, including age, sex, educational level, socioeconomic status, medical comorbidities, and social support, were collected using a structured questionnaire. The collected data were analyzed using SPSS software, version 24. To address the research objectives, the following statistical analyses were conducted:

Correlation between depression severity and stigma: Pearson's correlation coefficient was used to assess the relationship between PHQ-9 scores and stigma scores (DSS-Personal and DSS-Perceived). The analysis was stratified to examine differences according to depression severity.

Comparison of personal and perceived stigma: A paired-samples t-test was performed to compare the mean scores of personal stigma and perceived stigma. In addition, multiple linear regression analyses were used to identify factors influencing the two types of stigma.

Influence of sociodemographic factors on stigma and depression: Multiple regression analyses were conducted to assess the influence of age, sex, education, socioeconomic status, comorbidities, and social support on stigma levels and depression severity. Results were reported as regression coefficients adjusted for variables of interest.

Subgroup analysis: To explore the effects of categorical variables (e.g., sex, educational level), ANOVA and chi-square tests were used. Comparisons based on these variables allowed for the evaluation of differences between groups.

The study was approved by the Ethics Committee of the "Nicolae Testemițanu" State University of Medicine and Pharmacy. All participants provided written informed consent prior to inclusion in the study. Data were collected anonymously and stored in a secure database to protect participant confidentiality.

RESEARCH FINDINGS ON THE RELATIONSHIP BETWEEN DEPRESSION, SOCIAL FACTORS, AND STIGMA

Geographical distribution. Participants in this study were selected from 10 administrative units of the Republic of Moldova, including the districts of Drochia, Sîngerei, Bălți, Călărași, Strășeni, Orhei, Chișinău, Ialoveni, and Ștefan Vodă. The selection of administrative units was conducted through a stratified randomization process aimed at ensuring balanced representation of urban and rural areas. Districts were randomly selected from a list of eligible administrative units and stratified according to level of urbanization, access to mental health services, and socio-economic factors. This method enabled the formation of a balanced and representative sample for analyzing depression-related stigma. The included regions cover large urban settings (Chișinău, Bălți) as well as semi-urban and rural areas, where perceptions of mental health may be influenced by cultural factors and access to specialized services. District selection also considered the presence of Community Mental Health Centers, allowing analysis of their impact on levels of stigmatization. Randomization reduced potential selection bias and increased the external validity of the findings.

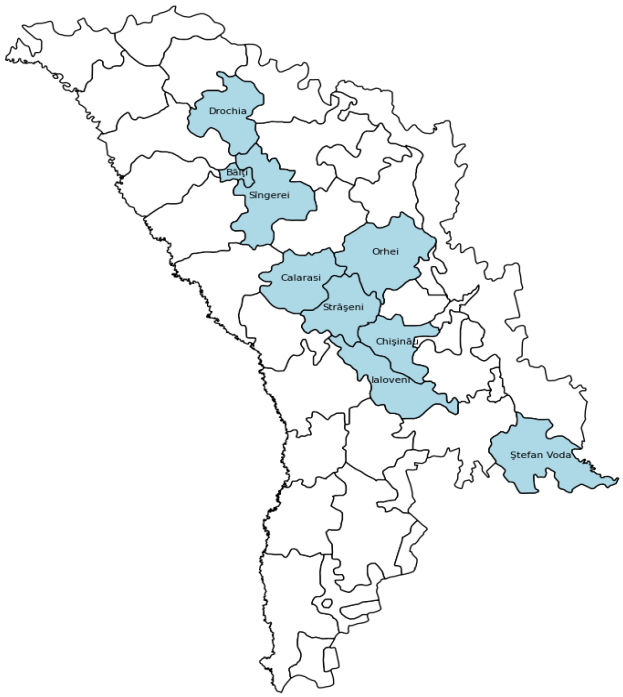

Figure 3. Geographical distribution of participants

This map illustrates the administrative units of the Republic of Moldova included in the study. The units highlighted in blue indicate the participating districts and municipalities.

Comparison of perceived stigma by depression severity

Figure 20 presents the results of the comparison of perceived stigma (DSS_P_perceived) among participant groups with different levels of depression severity, based on PHQ-9 scores.

The boxplot on the left shows that:

- participants without depression report lower levels of perceived stigma, with greater

variability;

- individuals with mild depression show slightly higher levels of stigma, comparable to those without depression;
- participants with moderate and severe depression report significantly higher levels of perceived stigma, with clearly higher median values compared to other groups;
- severe depression is associated with the highest levels of perceived stigma.

The group comparison matrix on the right illustrates the statistical significance of differences between groups, as shown in the p-value heatmap:

- Adjusted p-values are extremely small (<< 0.05) for most comparisons, indicating statistically significant differences between groups.
- Differences between no depression and all forms of depression are significant ($p < 1e-08$), confirming that depression severity influences perceived stigma.
- Differences are also observed between moderate and severe depression ($p = 0.00029$), suggesting a progressive increase in perceived stigma with increasing depression severity.

Perceived stigma increases progressively with depression severity, indicating that individuals with more severe depression experience higher levels of social stigmatization. Group differences are statistically significant, demonstrating a clear relationship between depression and stigma perception. These findings support the need for stigma-reduction interventions, particularly for individuals with moderate and severe depression.

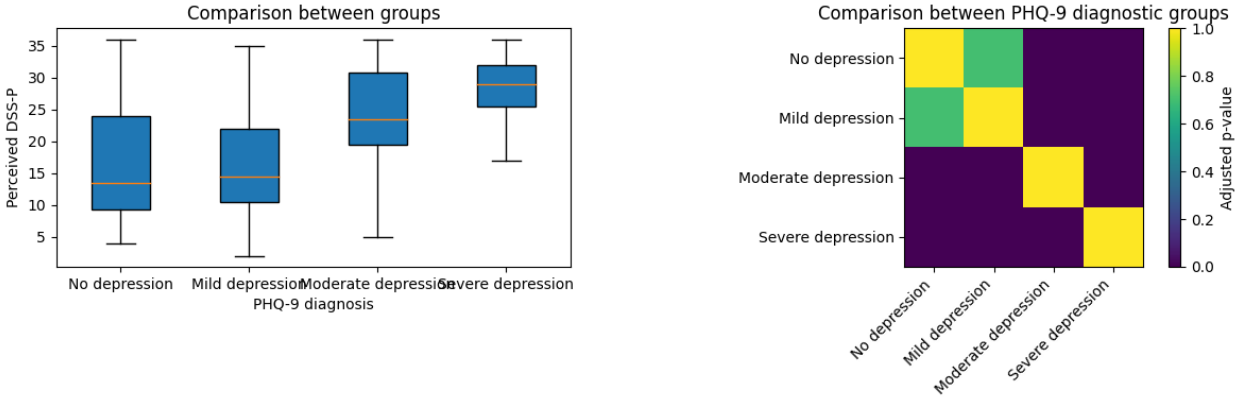

Figure 20. Comparison of perceived stigma (DSS_P_perceived) by depression severity

Figure 23 presents the mean DSSa scores for different statements about depression, ranked in descending order.

Statements with the highest scores (greater stigma) include:

- "I would not hire someone who has been depressed,"
- "Depression is not a real illness,"
- "Depression is a sign of weakness,"
- "I would not vote for a politician who has been depressed."

These statements reflect social and professional stigmatization of depression, suggesting reluctance to view individuals with depression as suitable for employment or leadership roles.

Statements with moderate scores include

- "People with depression are unpredictable"
- "Depression can be overcome by willpower,"

These statements are reflecting misunderstanding of the nature of depression, either by perceiving it as leading to unstable behavior or by assuming it can be overcome solely through mental strength.

Statements with the lowest scores, though still significant, include

- "People with depression are dangerous,"
- "I would not tell anyone I have depression,"
- "It is better to avoid people with depression."

Although these statements have slightly lower scores, they indicate tendencies toward isolation and avoidance, which may exacerbate stigma and self-stigma.

These results suggest that the highest levels of stigmatization are associated with social and professional dimensions, indicating negative perceptions regarding the ability of individuals with depression to work or hold public positions. The myth that depression is not a real illness and can be overcome through willpower remains prevalent, highlighting the need for mental health education. Self-stigmatization is evident in statements such as "I would not tell anyone I have depression," which may explain low rates of professional help-seeking. Anti-stigma interventions should specifically target myths portraying depression as personal weakness and reduce fear of discrimination in the workplace and society.

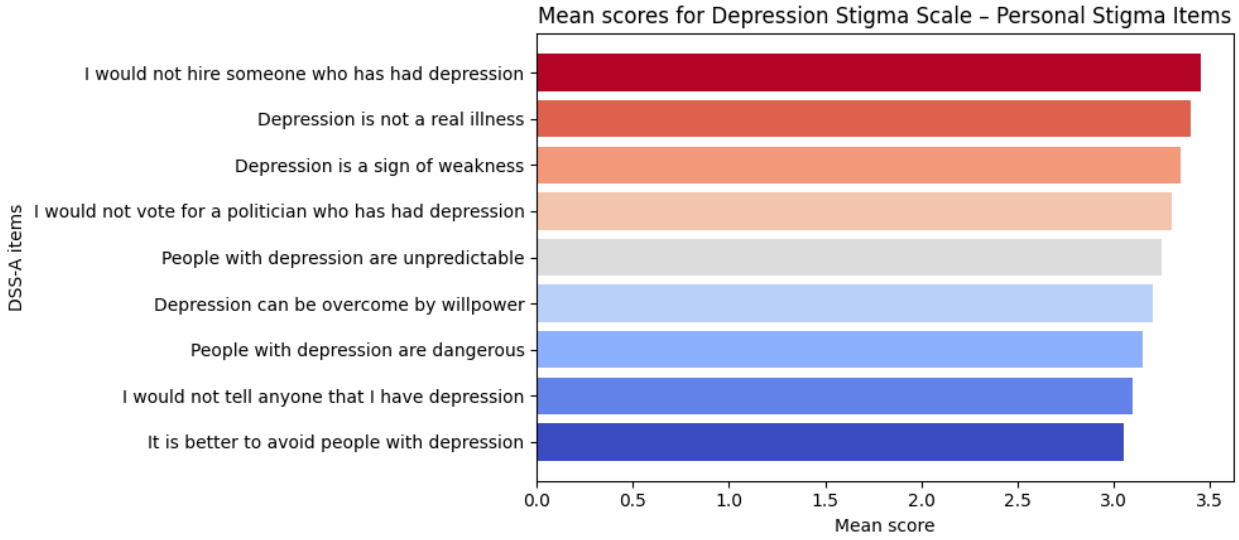

Figure 23. Mean DSSa scores for statements about depression

Comparison of personal and perceived stigma scores by employment status

Analysis of DSS-Personal and DSS-Perceived scores by employment status provides insight into how different socio-professional groups experience and perceive stigma associated with mental disorders. The results indicate that employment status influences both perception and internalization of stigma. Unemployed individuals and retirees are more vulnerable to stigmatization, whereas students and part-time employees appear more protected. Significant differences between perceived and internalized stigma suggest that contextual factors such as educational and professional environments may play an important role in reducing the impact of stigma.

These findings highlight the importance of tailored interventions for different socio-professional groups to reduce both perceived and internalized stigma.

Comparison of personal and perceived stigma scores by level of education

Educational level is an important factor in stigma perception and internalization. Analysis

of DSS-Personal and DSS-Perceived scores by highest completed education level provides insight into how education influences stigma experiences. Figures 35 and 36 present the distributions of DSS-Personal and DSS-Perceived scores for the following education categories: 4 grades, 12 grades (without baccalaureate), 12 grades (with baccalaureate), college, and university/bachelor's/master's level.

A common pattern is observed for both dimensions, with individuals with lower education levels exhibiting higher stigma scores. Significant group differences indicate that education not only reduces perception of social stigma but also helps prevent its internalization. A discrepancy between perceived and internalized stigma among those with secondary education suggests awareness of stigma without deep internalization.

These findings confirm that education influences both social perception and internalization of stigma. Individuals with lower education experience and perceive greater stigma, whereas those with higher education appear more protected. This underscores the importance of educational programs and awareness campaigns targeting individuals with lower educational attainment.

Comparison of personal and perceived stigma scores by marital status

Marital status is a socio-demographic factor that may influence stigma perception and internalization. Analysis of DSS-Personal and DSS-Perceived scores by marital status includes the following categories: cohabiting, married (with or without spouse in household), divorced, widowed, and uncategorized.

DSS-Personal score distributions show moderate variation between groups. These data suggest that perceived stigma is influenced by changes in marital status, with divorce and widowhood associated with higher perceived social stigma. Widowed and divorced individuals show high scores in both stigma dimensions, indicating both internalization and heightened perception of discrimination. Married individuals appear most protected, with the lowest DSS-Personal and DSS-Perceived scores. Discrepancies between perceived and personal stigma among uncategorized individuals suggest perception of external stigma without equivalent internalization.

These findings indicate that marital status plays a significant role in stigma perception and internalization. Divorced and widowed individuals are most affected, while married individuals appear more protected, likely due to emotional and social support from family. These results highlight the need for interventions providing emotional and psychological support to individuals experiencing separation or loss to mitigate the negative impact of stigma on mental health.

Comparison of personal and perceived stigma scores by number of children

Number of children is a socio-demographic factor that may influence stigma perception and internalization. DSS-Personal and DSS-Perceived score distributions are presented by number of children: 0, 1, 2, 3, and 4 or more.

Results suggest that family responsibilities and support provided by children may reduce internalization of stigma by offering a sense of belonging and a defined social role.

DSS-Perceived scores show a slightly different pattern compared to DSS-Personal. Individuals without children and those with one child perceive higher stigma, potentially related to social pressures regarding parental status. Individuals with three or more children tend to perceive less external stigma. Statistically significant differences are observed between childless individuals and those with multiple children, confirming higher perceived stigma among those without children.

Individuals without children have high scores on both DSS-Personal and DSS-Perceived, indicating greater vulnerability to stigma. Those with more children show lower scores on both dimensions, suggesting protection against stigma, possibly due to family support and social role

fulfillment. Differences between DSS-Personal and DSS-Perceived among individuals with one child suggest perception of stigma without equivalent internalization.

These findings indicate that number of children influences stigma perception and internalization, emphasizing the protective role of social support and belonging.

Comparison of personal and perceived stigma scores by personal income

Personal income is a socio-economic factor influencing stigma perception and internalization. DSS-Personal and DSS-Perceived score distributions are presented for income categories: <2500, 2500–4000, 4000–7000, and >7000.

These results suggest that higher income may be a protective factor against personal stigma, potentially due to greater autonomy and access to resources.

DSS-Perceived scores follow a similar pattern, with individuals with lower income perceiving higher social stigma, possibly related to economic discrimination or limited access to services. Individuals with higher income (>7000) perceive less social stigma. Statistically significant differences are observed between low- and high-income groups, confirming stronger perceived stigma among individuals with lower income.

These data suggest that the perception of stigmatization is strongly influenced by economic status, with individuals with higher income being less exposed to social stigma. Participants with lower income show higher scores on both DSS-Personal and DSS-Perceived, indicating that the experience of stigmatization is more profound and more difficult to manage in this group. Individuals with higher income display lower scores across both dimensions, suggesting better protection against stigmatization. The differences between DSS-Personal and DSS-Perceived within the intermediate income group (2500–7000) indicate that, although these individuals may perceive stigmatization from society, they do not internalize it to the same extent.

The presented results suggest that personal income significantly influences both the perception of social stigmatization and its internalization. Individuals with lower income are more vulnerable to stigma, whereas those with higher income appear to be more protected, likely due to greater autonomy, better access to services, and a more stable social status. These findings highlight the need for social inclusion policies and measures aimed at reducing economic inequalities in order to prevent the negative impact of stigmatization on individuals with low income.

Table 2. Correlation analysis between personal stigma (DSS attitudinal) and depression levels (PHQ-9)

Nr.	Item DSS (myth/stereotype)	Severe (%)	Moderate (%)	Mild (%)	None (%)	Chi²	p-value	Strength of association
1	"Depression can be overcome by willpower"	15,60%	58,30 %	23,40 %	6,50 %	138,33	<0,001	Strong
2	"Depression is not a real illness"	22,05%	48,40 %	21,80 %	7,05 %	98,87	<0,001	Strong
3	"People with depression are dangerous"	22,00%	46,70 %	23,90 %	7,40 %	108,75	<0,001	Strong

4	"It is better to avoid people with depression"	21,90%	46,40 %	20,75 %	7,50 %	72,22	<0,00 1	Strong
5	"People with depression are unpredictable"	21,60%	44,35 %	26,45 %	7,15 %	97,64	<0,00 1	Strong
6	"I would not tell anyone that I have depression"	25,05%	46,85 %	20,70 %	7,40 %	91,68	<0,00 1	Strong
7	"I would not hire someone who has been depressed"	21,90%	47,35 %	19,65 %	7,80 %	97,54	<0,00 1	Strong
8	"I would not vote for a politician who has been depressed"	21,00%	49,60 %	21,85 %	7,25 %	104,5 9	<0,00 1	Strong
9	"People become depressed because of personal weakness"	21,05%	47,15 %	23,50 %	8,30 %	95,33	<0,00 1	Strong

The correlation analysis between depression severity and stigmatizing statements (DSS scale) identified statistically significant associations ($p < 0.001$) for all nine items analyzed.

The statement "I would not tell anyone that I have depression" showed the strongest association with severe depression (25.05%) and moderate depression (46.85%), indicating that internalized stigma and concealment of depression have the greatest negative impact on the severity of depressive symptoms.

The second strongest negative impact was observed for the statement "Depression is not a real illness," which was associated with severe depression in 22.05% of cases and moderate depression in 48.40%, suggesting that minimizing depression as a legitimate condition significantly contributes to symptom severity and hinders help-seeking behavior.

Other statements with a significant negative effect include "People with depression are dangerous" (22.0% severe depression and 46.7% moderate depression) and "It is better to avoid people with depression" (21.9% severe depression and 46.4% moderate depression).

These results emphasize the need for educational programs aimed at combating depression-related stigma and facilitating access to specialized support for affected individuals.

Educational materials aimed at reducing depression-related stigma.

The research findings highlighted the presence of significant levels of stigmatization among individuals with depression, influenced by a range of clinical and sociodemographic factors. It was also found that stigma—both perceived and personal—represents a major barrier to seeking specialized help and to treatment adherence.

The analysis of existing professional training for medical students, residents, and family physicians revealed that, although current curricula include topics related to the diagnosis and treatment of depression, stigma associated with depression is not addressed in a systematic and specific manner.

In this context, a set of educational materials was developed to complement professional training in mental health by incorporating content specifically aimed at reducing depression-related stigma. This set includes PowerPoint presentations and video tutorials designed to support teaching activities at undergraduate, residency, and master's levels, as well as continuing medical education programs. These materials serve as supportive tools for initial and ongoing training of medical personnel, with the aim of improving patient–provider relationships and promoting attitudes based on empathy, respect, and non-discrimination.

A particularly relevant outcome is the video tutorial designed for family physicians, conceived as a practical tool for the recognition and management of depression. The tutorial includes a dedicated section on depression-related stigma, presenting common myths and stereotypes, mechanisms of self-stigmatization, the impact of stigma on treatment adherence, and strategies for stigma reduction through empathic communication and appropriate support. This multimedia material has been used in training activities and represents an example of integrating research findings into modern educational tools.

The development of educational materials—PowerPoint presentations, video tutorials, and copyrighted publications—confirmed the applied value of the research, demonstrating the feasibility of integrating depression stigma topics into university training and continuing medical education programs. These resources constitute useful tools for students, residents, and family physicians, supporting the development of competencies necessary for recognizing, addressing, and reducing stigma. The contribution to the update of the National Clinical Protocol on Depression highlights the scientific relevance of the findings and their direct impact on clinical practice and health policy.

DISCUTIONS OF THE RESULTS IN RELATION TO THE SCIENTIFIC LITERATURE ON DEPRESSION AND STIGMATIZATION

The data obtained in the present study highlight a significant association between the severity of depressive symptoms and the level of stigmatization experienced by respondents. Among individuals with high PHQ-9 scores, indicating severe depression, a higher frequency of affirmative responses was observed for items on the DSS scale reflecting self-stigmatization. According to the study data, 25.05% of individuals with severe depression agreed with the statement "I would not tell anyone that I have depression," and 20.14% indicated that they "feel inferior to others because of depression." These findings demonstrate not only the presence of perceived stigma but also a high degree of internalization among individuals with severe symptomatology.

The scientific literature consistently supports this relationship. A significant association between depression severity and experienced stigma was identified in a multicenter study conducted in 35 countries, highlighting the impact of stigma on psychosocial functioning and access to services [6]. Another study complements these findings, showing that symptom severity is an important predictor of self-stigmatization, which in turn correlates with reduced self-esteem and increased social avoidance behaviors [17].

One study indicates that internalized stigma intensifies as depressive symptoms worsen, with this relationship being mediated by negative self-perceptions and lack of social support [10]. Another study explains, from a cognitive perspective, that individuals with depression develop dysfunctional beliefs about themselves shaped by experiences of stigmatization, which are then internalized and perpetuated in the absence of adequate psychotherapeutic interventions [22].

According to one study, in cases of severe depression, stigma is not merely an external social phenomenon but becomes part of the individual's identity, negatively influencing help-seeking behaviors [23]. This is further supported by another study that identified a correlation between perceived stigma and delayed access to mental health services, particularly in the context of moderate and severe depression [24].

In the present study, elevated scores on DSS items expressing shame, guilt, and feelings of inferiority suggest the presence of a high level of self-stigmatization. This phenomenon is explained by research highlighting the role of cognitive distortions and negative attributional styles in reinforcing stigmatizing messages among individuals with depression [2]. Internalized stigma affects not only self-esteem but also hope for recovery, potentially leading to symptom chronicity and social isolation. Moreover, the World Health Organization emphasizes in its global report that stigma associated with depression is deeply rooted in many cultures, particularly in low- and middle-income countries such as the Republic of Moldova, where access to services is limited and population-level mental health literacy remains insufficient [25].

These findings strongly support the hypothesis that depression severity is correlated with higher levels of both perceived and internalized stigma. The clinical implications are substantial, as individuals with severe depression not only experience more intense psychological distress but also face additional barriers to accessing support due to internalized stigma. This underscores the need to incorporate anti-stigma components into therapeutic interventions, as well as to promote psychoeducation strategies, positive social contact, and counseling focused on rebuilding self-esteem and hope for recovery.

The research results highlight a significant association between certain sociodemographic

characteristics and levels of perceived stigma. Significant differences were observed according to sex, age, economic status, and educational level, with higher levels of stigmatization recorded among women, older individuals, and respondents with lower income or lower educational attainment.

These findings are supported by the scientific literature, which emphasizes that depression-related stigma manifests more intensely among individuals with limited access to educational and economic resources, while cultural context and collective perceptions contribute to the amplification of discrimination [3]. A recent study conducted in a similar socio-economic context identified a higher prevalence of internalized stigma among patients with low income and low educational level, indicating the essential role of these factors in shaping perceptions of personal suffering [5].

According to a recent study, significant differences in reported stigma levels were identified among students by sex, with women showing a greater tendency to internalize negative messages related to depression, a finding also confirmed in the present research [4]. Similarly, another study demonstrated that self-stigma is influenced by identity-related factors and by the way individuals perceive socially constructed gender expectations [12].

A recent study added a relevant cognitive dimension, showing that negative processing of social feedback is more frequent among individuals with a history of social invalidation, a phenomenon often associated with older age and lack of family support [14]. Another study corroborates this observation, reporting a correlation between participant age and higher stigma scores, particularly in contexts where access to mental health services is perceived as difficult or stigmatizing in itself [18].

According to recent evidence, factors such as lower educational attainment, belonging to vulnerable groups, and lack of prior contact with mental health services contribute to the persistence of negative stereotypes [19]. The scientific literature also demonstrates that beliefs about the causes of depression (e.g., lifestyle-related explanations) may generate different levels of stigmatization depending on sociodemographic profile [20].

An extensive meta-analysis identified age, sex, and income as consistent risk factors for self-stigmatization among individuals with depression [21]. In addition, there is clear evidence that depression cannot be understood in isolation from its social context and structural determinants, including education, income, and social position [26].

The results of the present study align with these theoretical and empirical perspectives, suggesting that anti-stigma interventions should be formulated in a differentiated manner, taking into account the sociodemographic profile of the target population, and that stigma-reduction strategies should be integrated with initiatives promoting mental health literacy, community support, and equitable access to services. The study clearly demonstrates the role of perceived stigma in reducing the likelihood of seeking psychological support, even among individuals who recognize depressive symptoms and their severity. This barrier is well documented in the literature and persists even in societies with formal access to mental health services.

In the present research, participants who reported higher levels of perceived stigma also showed greater reluctance to seek help from psychologists or psychiatrists, confirming that stigma is not merely a symbolic obstacle but directly influences help-seeking behaviors. This phenomenon is supported by multiple studies that, using phenomenological approaches, have shown that perceived stigma actively reduces patients' willingness to seek support, even when service networks are available [27].

A qualitative study conducted in Indonesia described the complexity of stigma experienced

by patients and the manner in which it becomes internalized to the point that treatment avoidance functions as a psychological protection mechanism against anticipated social judgment [28]. Other researchers have shown that, among mental health service users in Chile, experiences of stigmatization in interactions with health professionals were as influential in avoiding support as widely held cultural beliefs [29].

Another study further complements this perspective by analyzing how stigma leads individuals to avoid not only treatment but also any form of communication about their psychological distress, thereby creating a vicious cycle between stigmatization, isolation, and delayed intervention [30].

The data from the present study indicate that, in Moldova, these phenomena are amplified by factors such as low levels of mental health literacy, lack of prior experience with mental health specialists, and fear of being judged within the community. It is essential that stigma-reduction strategies include educational components, campaigns aimed at normalizing psychological distress, and the active involvement of beneficiaries who have overcome these barriers, in order to create contexts of positive contact. In the present study, the comparative analysis of items from the DSS scale revealed a notable difference between perceived stigma and personal stigma. Participants expressed higher agreement with statements reflecting societal beliefs ("Most people believe that depression is a sign of weakness") than with those reflecting personal endorsement of these beliefs ("I believe that people with depression are weak"). This discrepancy suggests that, although social stigma is strongly perceived, it is not always internalized at the attitudinal level by affected individuals.

he literature demonstrates that the perception of social stigma functions as an external stressor, which may be filtered or amplified depending on prior experiences, level of education, social support, and quality of interpersonal relationships. Thus, two individuals exposed to the same stigmatizing environment may respond differently: one may develop self-stigmatization, while the other may reject such beliefs and maintain a positive self-image [31].

At the same time, some studies warn of the risk that perceived stigma may gradually transform into personal stigma in the absence of protective factors such as emotional support, positive contact with individuals with similar lived experiences, or access to scientific information about depression. This transition can be prevented through psychoeducational interventions and exposure to positive recovery models [32].

The scientific literature proposes a conceptual framework in which the distinction between perceiving stigma and adopting it as a negative identity is essential for psychological interventions. It suggests that therapeutic work should address not only individual beliefs but also the social environment that reinforces them [33].

In conclusion, the results of the present study reflect a complex reality in which the perception of social stigma is widespread but not always accompanied by internalization of stigmatizing beliefs. From a clinical and psychosocial perspective, this distinction is crucial for the formulation of prevention and intervention strategies: reducing social stigma must be accompanied by support for individuals in rejecting these beliefs and in maintaining a healthy self-image.

The presence of somatic comorbidities among individuals with depression is associated with more severe symptomatology and an increased risk of stigmatization. Studies suggest that in patients with chronic conditions such as diabetes, cardiovascular diseases, or musculoskeletal disorders, depression is often underdiagnosed, and stigma is intensified by the perception of dual vulnerability [34–36]. Moreover, comorbidities may amplify feelings of worthlessness,

helplessness, and self-blame, which fuel the process of self-stigmatization [37,38].

In the present study, although not all associated conditions were analyzed in detail, a substantial proportion of respondents reported the presence of chronic illnesses, and higher scores were observed among them on DSS items related to shame and feelings of inferiority. These findings support evidence from the literature indicating that the interaction between depression and other somatic pathologies contributes to reduced quality of life and reluctance to seek medical support [39,40].

Regarding social support, it is widely recognized as a key protective factor against both depression and stigmatization. Lack of familial, social, or community support contributes to the consolidation of negative self-beliefs and to increased social isolation [41,42]. In our study, respondents who reported feeling unsupported were more likely to avoid contact with specialists and expressed stigmatizing beliefs at both perceived and personal levels.

These results are consistent with international literature demonstrating that adequate social support not only reduces depressive symptoms but also protects individuals from the effects of stigmatization [43,44]. Furthermore, the presence of a support network appears to facilitate recovery and increase the likelihood of accessing psychological or psychiatric services [45,46].

Gender emerged as a relevant differentiating factor. In the analyzed sample, women showed significantly higher mean scores compared to men, suggesting a higher prevalence of moderate and severe depressive symptoms. This finding is consistent with international literature highlighting women's increased vulnerability to depression, explained by both biological factors and multiple social roles, as well as higher levels of perceived stress [41,47].

Age was also associated with differences in depression severity. Respondents aged 50 years and older recorded higher PHQ-9 scores, indicating more severe symptoms. This may be related to social isolation, comorbidities, and reduced family support, factors also described in studies conducted in similar populations [45,48].

With regard to educational level, respondents with primary or secondary education had higher average PHQ-9 scores compared to those with higher education. This supports the hypothesis that education acts as a protective factor by facilitating access to information, services, and effective coping strategies [34,49].

Socioeconomic status also influenced symptom severity, with individuals reporting lower income more frequently experiencing severe depressive symptoms compared to those with stable or above-average income. This association reflects findings in the literature emphasizing the impact of economic insecurity on mental health and on the ability to access psychological support [50,51].

Social support proved to be a significant moderating factor. Respondents who reported having adequate family or social support networks exhibited lower PHQ-9 scores than those who described themselves as isolated or unsupported. These findings align with the literature recognizing social support as an essential protective factor against the development of severe forms of depression [43].

Therefore, the study data confirm the hypothesis that depression severity is influenced by a range of interdependent sociodemographic factors. This has direct implications for the targeting of therapeutic interventions and mental health policies, which should take into account the socioeconomic, age-related, and gender-specific context of each individual.

The results of this study are consistent with international literature emphasizing the crucial role of professional training in reducing stigma toward individuals with mental disorders. Multiple studies have shown that integrating stigma-related content into medical curricula contributes to

changing negative attitudes and increasing empathy in the physician–patient relationship. In this context, the development of a set of educational materials specifically addressing depression-related stigma represents a practical contribution of the present research and responds to World Health Organization recommendations on expanding mental health competencies among non-specialist medical professionals [52].

Compared to other international studies, where educational interventions often target the general population or psychiatric professionals, the present proposal focuses on the initial and continuing training of family physicians, students, and residents, a key group in the early identification and treatment of depression in community settings.

By analyzing the study results and comparing them with existing scientific literature, it is confirmed that depression-related stigma is a complex phenomenon influenced by a variety of individual, contextual, and structural factors. The findings support and extend current theoretical frameworks regarding the relationship between depressive symptom severity and the intensity of perceived and internalized stigma.

According to the analyzed data, depression severity correlates with increased levels of self-stigmatization, in line with multiple international studies showing that individuals with moderate and severe depression tend to adopt negative self-beliefs and avoid contact with support services. Thus, the central hypothesis of the research regarding the association between symptom severity and stigma levels is supported both empirically and theoretically.

It was also confirmed that sociodemographic variables significantly influence how stigma is perceived and internalized. Differences identified by sex, age, educational level, and socioeconomic status reflect pre-existing inequalities in access to information, resources, and mental health services, as documented in other studies conducted in similar cultural contexts. These findings reinforce the need for differentiated anti-stigma interventions tailored to the social profile of beneficiaries.

A particularly relevant aspect emerging from the comparative analysis is the distinction between perceived stigma and personal stigma. The study demonstrated that, although respondents recognize the existence of negative societal attitudes, they do not always internalize them. This observation is supported by the literature and has major psychological and clinical implications, as the degree of stigma internalization directly determines the likelihood of seeking specialized help.

In addition, data analysis highlighted the aggravating role of somatic comorbidities and lack of social support in reinforcing stigma and maintaining depressive symptoms. These results align with multidimensional explanatory models of depression, which emphasize the interaction between individual vulnerabilities and environmental factors. Compared with international literature, the findings of the present study add context-specific relevance for the Republic of Moldova, highlighting the urgent need for integrated community-based interventions.

The development of a set of educational materials focused on depression-related stigma, intended for medical students, residents, and family physicians, represents a relevant applied contribution of this research, offering a useful tool for improving professional training and reducing the identified barriers to accessing mental health services.

CONCLUSIONS AND RECOMMENDATTIONS

Conclusions

The present research, focused on the analysis of clinical and social factors contributing to the emergence and persistence of stigma in depression, highlights a complex and interdependent reality in which psychopathological, social, and cultural variables interact dynamically. The study was designed around six core objectives, each addressed rigorously through a quantitative approach and supported by an extensive review of the scientific literature.

Based on the established objectives and the results obtained from both the literature review and empirical data analysis, the following conclusions can be drawn. These reflect both the theoretical and contextual dimensions of the relationship between depression and stigma, as well as the practical implications for stigma reduction and improved access to mental health services. The conclusions are structured according to the research objectives and emphasize factors associated with depression and stigma, differences between types of stigma, and opportunities for intervention through education and public health policies.

1. The scientific literature confirms that depression represents a major public health problem, associated with disability, social costs, and increased suicide risk, while stigma constitutes a critical barrier to early diagnosis and access to treatment. The relationship is bidirectional: depression increases vulnerability to stigma, and stigma amplifies symptom severity and reduces treatment adherence.

2. Theoretical models and international evidence show that stigma is a multidimensional phenomenon influenced by social, economic, and cultural factors. Stereotypes and myths about depression (e.g., “personal weakness” or “temporary condition”) contribute to self-stigmatization and delay help-seeking, underscoring the need to integrate stigma reduction into clinical, educational, and public health interventions.

3. Data analysis revealed significant associations between sociodemographic factors and levels of depression. Older age, female sex, lower educational attainment, and low income were correlated with higher depression scores.

4. Correlations between clinical and social factors indicate that the presence of comorbidities is associated with higher levels of depression, whereas strong social support is correlated with lower scores.

5. Levels of stigma, both personal and perceived, are associated with social factors. Older age, lower educational level, and low income are linked to higher stigma scores.

6. Greater social support is associated with lower stigma scores, while the presence of comorbidities correlates with a more pronounced experience of stigma.

7. The study identified differences between personal stigma and perceived stigma. Perceived stigma was generally higher than personal stigma, suggesting that individuals with depression tend to perceive negative societal attitudes more strongly than they internalize them.

8. The discrepancy between personal and perceived stigma indicates that social stigma does not always translate into full internalization, opening opportunities for interventions aimed at preventing self-stigmatization through awareness campaigns and social support.

9. Research findings demonstrated a positive correlation between depression severity and stigma, with individuals experiencing more severe depressive symptoms reporting higher levels of both personal and perceived stigma.

10. The intensity of depressive symptoms not only increases clinical burden but also amplifies vulnerability to stigma, highlighting the importance of early and integrated interventions targeting both depression treatment and stigma reduction.

11. The research data supported the development of a set of educational materials adapted to the local context, emphasizing the impact of stigma on individuals with depression and effective strategies for stigma reduction.

12. Integrating these materials into university curricula in the health field contributes to the development of competencies among future professionals, promotes non-stigmatizing attitudes, and improves the quality of care for patients with depression.

Recommendations

Based on the conclusions outlined above, the following recommendations are proposed for medical practice, public policy, and university education in mental health:

1. Systematic integration of stigma-related content into clinical guidelines and protocols for depression.
2. Development of awareness campaigns addressing persistent myths and stereotypes about depression.
3. Implementation of screening programs tailored to vulnerable groups (older adults, women, populations with low education and income).
4. Strengthening community-based social support mechanisms to prevent the worsening of depressive symptoms.
5. Development of differentiated interventions that take into account age, gender, education, and income in order to reduce stigma.
6. Increased access to educational programs and information campaigns, with a focus on socioeconomically disadvantaged groups.
7. Creation of psychological support programs aimed at preventing self-stigmatization.
8. Development of community campaigns to reduce negative societal attitudes toward depression.
9. Prioritization of early interventions for patients with severe depression, integrating medical treatment with psychosocial support.
10. Establishment of mechanisms to monitor stigma as part of standardized clinical assessment of patients with depression.
11. Development and implementation of university modules dedicated to reducing depression-related stigma.
12. Expansion of professional training for medical and non-medical staff, with an emphasis on non-stigmatizing attitudes and empathy in patient care.

The obtained results highlight the need for a coordinated effort at clinical, educational, and policy levels to reduce depression-related stigma. An integrated, evidence-based approach is required, combining education, community support, and social inclusion policies in order to improve access to mental health services and enhance patients' quality of life.

BIBLIOGRAPHY

1. WHO. Depression and Other Common Mental Disorders. 2017.
2. Kanter JW, Rusch LC, Brondino MJ. Depression Self-Stigma. Journal of Nervous & Mental Disease. 2008 Sep;196(9):663–70.
3. Campo-Arias A, Herazo E, Ceballos-Ospino GA. Stigma-discrimination complex associated with major depressive disorder. Revista de la Facultad de Medicina. 2019 Oct 1;67(4):531–2.
4. Al-Shannaq Y, Jaradat D, Ta'an WF, Jaradat D. Depression stigma, depression literacy, and psychological help seeking attitudes among school and university students. Arch Psychiatr Nurs. 2023 Oct;46:98–106.
5. Alemayehu Y, Demilew D, Asfaw G, Asfaw H, Alemnew N, Tadesse A. Internalized Stigma and Associated Factors among Patients with Major Depressive Disorder at the Outpatient Department of Amanuel Mental Specialized Hospital, Addis Ababa, Ethiopia, 2019: A Cross-Sectional Study. Psychiatry J. 2020 Aug 17;2020:1–9.
6. Lasalvia A, Zoppei S, Van Bortel T, Bonetto C, Cristofalo D, Wahlbeck K, et al. Global pattern of experienced and anticipated discrimination reported by people with major depressive disorder: a cross-sectional survey. The Lancet. 2013 Jan;381(9860):55–62.
7. Liu X. The global burden of depressive disorder from 1990 to 2019: a systematic analysis for the global burden of disease study 2019. In: Royle G, Lipkin SM, editors. Second International Conference on Biological Engineering and Medical Science (ICBioMed 2022). SPIE; 2023. p. 180.
8. Depressive Disorders. In: Adult Psychopathology and Diagnosis, Eighth Edition. Wiley; 2018. p. 247–98.
9. Charnsil C. Comparing stigma toward depression in physicians and the general population and its impact on seeking mental health treatment: a cross-sectional study. 2023.
10. Filia KM, Teo SM, Brennan N, Freeburn T, Baker D, Browne V, et al. Help-seeking experiences and barriers to mental health support for adolescents experiencing mental ill-health and social exclusion. 2023.
11. Shi J, Chen Y, Jiang Y, Li Y, Wang W, Zhao H, et al. Stigma and its associations with medication adherence in major depressive disorder. Psychiatry Res. 2024 Jan;331:115664.
12. Vieira M, Fonseca Silva B, Silva Ribeiro J. Internalized Stigma – How we view our Mental Illness. European Psychiatry. 2023 Mar 19;66(S1):S1032–S1032.
13. Esposito CM, Mancini M, Estradé A, Rosfort R, Fusar-Poli P, Stanghellini G. How do depressed people feel perceived by others? A qualitative study from the patient's perspective. J Affect Disord Rep. 2024 Apr;16:100776.
14. Kirchner L, Rief W, Müller L, Buchwald H, Fuhrmann K, Berg M. Depressive symptoms and the processing of unexpected social feedback: Differences in surprise levels, feedback acceptance, and "immunizing" cognition. PLoS One. 2024 Aug 26;19(8):e0307035.
15. Canady VA. New research links negative self-image with depression. Mental Health Weekly. 2023 Mar 6;33(10):7–8.
16. Hamidi S, Ebrahimi H, Vahidi M, Areshtanab HN. Internalized Stigma and its Association with Hope, Self-Esteem, Self-Efficacy, and Treatment Adherence among Outpatients with Severe Mental Illness: A Cross-Sectional Survey. Iran J Nurs Midwifery Res. 2023 May;28(3):345–51.

17. Tu CY, Liu WS, Huang WL. Associations of internalized stigma with psychosocial functioning and quality of life in people with schizophrenia. International Journal of Social Psychiatry. 2023 Sep 7;69(6):1409–19.

18. Yadav J, Mishra S, Nischal A, Prakash AJ. Relationship between stigma, self-esteem and quality of life among patients with depression at a tertiary care unit of North India: a cross-sectional study. Minerva Psychiatry. 2023 Jun;64(2).

19. Zhang D. Predictors of Perceived, Personal, and Self- Stigma on Depression and Relevant Interventions. Lecture Notes in Education Psychology and Public Media. 2023 Mar 1;3(1):207–14.

20. Scholze K, Reich H, Passow P, Sander C, Czaplicki A, Hegerl U. Lifestyle causal beliefs are associated with higher personal and perceived stigma regarding depressive disorders: results from a representative population survey. BMC Psychiatry. 2023 Jun 8;23(1):414.

21. Du N, Chong ESK, Wei D, Liu Z, Mu Z, Deng S, et al. Prevalence, risk, and protective factors of self-stigma for people living with depression: A systematic review and meta-analysis. J Affect Disord. 2023 Jul;332:327–40.

22. Talluri SS, Corrigan PW. The stigma of behavioral health conditions. In: Encyclopedia of Mental Health. Elsevier; 2023. p. 375–81.

23. Griffiths KM, Carron-Arthur B, Parsons A, Reid R. Effectiveness of programs for reducing the stigma associated with mental disorders. A meta-analysis of randomized controlled trials. World Psychiatry. 2014 Jun;13(2):161–75.

24. Henderson C, Evans-Lacko S, Thornicroft G. Mental Illness Stigma, Help Seeking, and Public Health Programs. Am J Public Health. 2013 May;103(5):777–80.

25. WHO. Depressive disorder (depression). 2023.

26. Ventriglio A, Castaldelli-Maia JM, Torales J, Chumakov E, De Berardis D. Social aspects of depression. In: Bhugra D, Moussaoui D, Craig TJ, editors. Oxford Textbook of Social Psychiatry. Oxford University PressOxford; 2022. p. 361–8.

27. Aziz A, Khan N. The Exploration of Stigma and Discrimination Among Patients Suffering from Depression: A Phenomenological Study. NUST Journal of Social Sciences and Humanities. 2022 Jul 4;7(2):206–30.

28. Subu MA, Wati DF, Netrida N, Priscilla V, Dias JM, Abraham MS, et al. Types of stigma experienced by patients with mental illness and mental health nurses in Indonesia: a qualitative content analysis. Int J Ment Health Syst. 2021 Dec 18;15(1):77.

29. Vaccari P, Ramírez-Vielma R, Saldivia S, Cova F, Vielma-Aguilera A, Victoriano V, et al. Stigma towards people with a diagnosis of severe mental disorder in primary healthcare centers: perspectives of service users and health teams in Chile. Int J Ment Health Syst. 2020 Dec 7;14(1):6.

30. Prizeman K, McCabe C, Weinstein N. Stigma and its impact on disclosure and mental health secrecy in young people with clinical depression symptoms: A qualitative analysis. PLoS One. 2024 Jan 5;19(1):e0296221.

31. Chen M. Stigma on People with Mental Illness. Lecture Notes in Education Psychology and Public Media. 2023 May 17;7(1):513–8.

32. Imai T. Mental Illness: Stigma. In: The International Encyclopedia of Health Communication. Wiley; 2022. p. 1–6.

33. Holley LC, Stromwall LK, Bashor KE. Reconceptualizing Stigma: Toward a Critical Anti-Oppression Paradigm. Stigma Res Action. 2012 Mar 7;2(2).

34. Adhikari MA, Karna MV, Sangroula MD. Depression: Symptoms, Causes, and Effective Coping Strategies. The American Journal of Patient Health Info. 2024 Jul 10;1(01).

35. Schlebusch L. Depression and suicidal behaviour. South African Family Practice. 2005 Jun 15;47(5):61–3.

36. Chang TE, Boyden SD. Depression and Chronic Medical Illness: New Treatment Approaches. In: The Massachusetts General Hospital Guide to Depression. Cham: Springer International Publishing; 2019. p. 33–44.

37. Berlim MT, Fleck MPA. Quality of Life and Major Depression. In: Quality of Life Impairment in Schizophrenia, Mood and Anxiety Disorders. Dordrecht: Springer Netherlands; 2007. p. 241–52.

38. Balatif R, Mawadhani Sukma AA. Depression and Its Impact on Various Aspects of Life - A Narrative Review. Current Psychiatry Research and Reviews. 2024 May;20(2):83–93.

39. Culpepper L. Understanding the Burden of Depression. J Clin Psychiatry. 2011 Jun 15;72(06):e19.

40. Evers S. Health economics of depression. 2nd ed. Vol. 28. 1994. 175 p.

41. Lewis G, Lewis G, Srinivasan R. Causes of Depression. In: Seminars in General Adult Psychiatry. Cambridge University Press; 2024. p. 89–107.

42. Goldberg JF. Perspectives on the success rate of current antidepressant pharmacotherapy. Expert Opin Pharmacother. 2022 Nov 2;23(16):1781–91.

43. Silva C, McGovern C, Gomez S, Beale E, Overholser J, Ridley J. Can I count on you? Social support, depression and suicide risk. Clin Psychol Psychother. 2023 Nov 14;30(6):1407–15.

44. Borecki L, Gozdzik-Zelazny A, Pokorski M. Personality and perception of stigma in psychiatric patients with depressive disorders. Eur J Med Res. 2010 Dec 4;15(S2):10.

45. Paykel ES. Depression: major problem for public health. Epidemiol Psichiatr Soc. 2006 Mar 18;15(1):4–10.

46. Viduani A, Benetti S, Martini T, Buchweitz C, Ottman K, Wahid SS, et al. Social isolation as a core feature of adolescent depression: a qualitative study in Porto Alegre, Brazil. Int J Qual Stud Health Well-being. 2021 Jan 1;16(1).

47. Grigoriadis S, Robinson GE. Gender Issues in Depression. Annals of Clinical Psychiatry. 2007 Oct;19(4):247–55.

48. Jacob KS. Depression: a major public health problem in need of a multi-sectoral response. Indian J Med Res. 2012 Oct;136(4):537–9.

49. Gu Y. A Literature Review on Social and Cultural Factors That Increase the Likelihood of Mental Illness Development in Developing Countries. Lecture Notes in Education Psychology and Public Media. 2024 Apr 18;44(1):62–6.

50. Naeem Mubarak, Sabba Kanwal, Fatima Rahman Rana, Saba Tariq, Sundus Tariq, Mohamed Hassan Elnaem, et al. Examining the tapestry of mental health crises in low-& middle-income countries: an intercontinental analysis of the contributing factors and instructive approaches". Journal of University Medical & Dental College. 2023 Nov 27;14(4).

51. Limenih G, MacDougall A, Wedlake M, Nouvet E. Depression and Global Mental Health in the Global South: A Critical Analysis of Policy and Discourse. International Journal of Social Determinants of Health and Health Services. 2024 Apr 17;54(2):95–107.

52. World Health Organization. Mental Health Gap Action Programme (mhGAP): Intervention guide for mental, neurological and substance use disorders in non-specialized health settings. Version 3.0. Geneva: World Health Organization; 2022.

LIST OF PUBLICATIONS AND PARTICIPATION IN SCIENTIFIC FORUMS

of Mr. Andrei Eșanu, Department of Mental Health, Medical Psychology and Psychotherapy,
carried out within the doctoral thesis in medical sciences,
entitled **CLINICAL AND SOCIAL FACTORS IN THE DEVELOPMENT OF THE PHENOMENON OF STIGMA IN DEPRESSION**
"Nicolae Testemițanu" State University of Medicine and Pharmacy of the Republic of Moldova

SCIENTIFIC PUBLICATIONS

- **Articles in international scientific journals:**

  - ✓ **articles in ISI journals, SCOPUS and other international databases***

1. Harhaji, Sanja, Sonila Tomori, Vladimir Nakov, Jana Chihai, Ivana Radić, Tedi Mana, Kaloyan Stoychev, **Andrei Eșanu**, and Mihail Cristian Pirlog. Stigmatising Attitudes Towards Mental Health Conditions Among Medical Students In Five South-Eastern European Countries. In: *Slovenian Journal of Public Health.* 2024; 63(4): 188-197 https://doi.org/10.2478/sjph-2024-0025 **(IF: 1.6)**

2. Wasserman D, Apter G, Bailey S, Balazs J, Chihai J, **Eșanu A** et al. Compulsory admissions of patients with mental disorders: State of the art on ethical and legislative aspects in 40 European countries. In: *European Psychiatry*, 2020; 63(1), p. e82. doi:10.1192/j.eurpsy.2020.79 **(IF: 7.16)**

3. **Eșanu A**, Morais V, Araújo J, Ramos E. Stigma toward people with mental disorders in adolescents: comparison between Portugal and Moldova. In: *Porto Biomedical Journal.* 2020; 5(6): p e089. doi: 10.1097/j.pbj.0000000000000089.

- **Articles in accredited national scientific journals:**
  - ✓ **articles in category B journals**

4. Chihai, J, Spinei L, Cernitanu M, Garaz G, **Eşanu A**, Bologan A. Probleme psihosociale determinate de pandemia COVID-19. În: *Revista de Ştiinţe ale Sănătăţii din Moldova*, 2020, nr. 2(24), pp. 161-169. ISSN 2345-1467.

5. **Eşanu A**, Chihai J. Stigmatizarea persoanelor cu depresie. În: *Studia Universitatis Moldaviae (Seria Ştiinţe ale Educaţiei)*. 2018, nr. 9(119), pp. 41-44. ISSN 1857-2103.

- **Summaries/abstracts/theses in national and international scientific conferences:**

  - ✓ **Eşanu A**, Chihai J. Stigma toward depression among patients in primary healthcare centers. În: *Materialele Congresului Internațional: Beyond borders: united for mental health. Chişinău*, 2024, p. 48b.

- ✓ **Eşanu A**. Stigmatizarea persoanelor cu depresie în rândul studenților de la medicina. În: *Materialele conferinței Cercetarea în biomedicină și sănătate: calitate, excelență și performanță*, Chișinău, 2023, p. 377.
- ✓ **Eşanu A**, Chihai J. Rolul Familiei în prevenirea Stigmatizării persoanelor cu Depresie în timpul pandemiei COVID -19. În: *Materialele Congresului Internațional al Societății Psihiatrilor, Narcologilor, Psihoterapeuților și Psihologilor Clinicieni Sănătate mintală într-o lume plină de provocări,* Chișinău, 2021, pp. 93-94.
- ✓ **Eșanu, A**. Stigmatization of people with depression in students. Stigmatizarea persoanelor cu depresie de către studenți. În: *Materialele Congresului consacrat aniversării a 75-a de la fondarea USMF „Nicolae Testemițanu",* Chișinău, 2020, p. 349.
- ✓ **Esanu A.** Stigma towards people with Depression. *În materialele congresului international: 23rd World Congress of Social Psychiatry "The social determinants of health/Mental Health and access to care",* Bucharest, Romania, 2019, p. 21.
- ✓ **Esanu A**. Stigma against people with depression in developing country. *În materialele: 3rd Eastern European Conference of Mental Health "In and Out of your Mind"*, Sibiu, Romania, 2019, p. 56.

- **Invention patents, patents, registration certificates, materials presented at invention exhibitions**
  - ✓ Chihai J., Adeola C., Coșulean R., Bologan A., **Eșanu A**. Manual de Psihoterapie. Adeverință privind înscrierea obiectului dreptului de autor și drepturi conexe. Seria OȘ Nr. 8092, 29.01.2025.
  - ✓ Chihai J., Eșanu A., Adeola C., Recuperare și reabilitarea psihosocială. Tratamentul contemporan în psihiatrie în Republica Moldova. Adeverință privind înscrierea obiectului dreptului de autor și drepturi conexe. Seria OȘ Nr. 8242, 08.07.2025.
  - ✓ Chihai J., Eșanu A., Adeola C., Probleme etice și juridice în psihiatrie. Cadrul Național de politici și normativ privind asigurarea drepturilor persoanelor cu probleme de sănătate mintală. Adeverință privind înscrierea obiectului dreptului de autor și drepturi conexe. Seria OȘ Nr. 8239, 08.07.2025.
  - ✓ Chihai J., Adeola C., Boronin L., Coșulean R., Bologan A., Eșanu A. Tulburările depresive. Tulburări ale dezvoltării psihologice a copilului și adolescentului în Republica Moldova. Adeverință privind înscrierea obiectului dreptului de autor și drepturi conexe. Seria OȘ Nr. 8236, 07.07.2025.
  - ✓ Chihai J., Eșanu A., Adeola C. Tulburările depresive. Managementul actualizat al pacienților în Republica Moldova. Adeverință privind înscrierea obiectului dreptului de autor și drepturi conexe. Seria OȘ Nr. 8237, 07.07.2025.
  - ✓ Chihai J., Eșanu A., Adeola C. Organizarea asistenței psihiatrice în Republica Moldova. Adeverință privind înscrierea obiectului dreptului de autor și drepturi conexe. Seria OȘ Nr. 8241, 08.07.2025.
  - ✓ Chihai J., Adeola C., Coșulean R., Bologan A., Eșanu A. Psihoterapi. Tratamentul contemporan în Republica Moldova. Adeverință privind înscrierea obiectului dreptului de autor și drepturi conexe. Seria OȘ Nr. 8235, 07.07.2025.

- **Participation with scientific communications at scientific forums:**

International

- ✓ **Esanu A**. Diagnosticul și tratamentul depresiei la nivel de asistență medicală primară. *IX-a ediție a Congresului Național de Psihiatrie, Sibiu, Romania*, 19-22 martie 2025.
- ✓ **Esanu A.** Bune practici în depășirea Stigmatizării și creșterea accesului la serviciile de Sănătate Mintală și suportul psihosocial în rîndul refugiaților din Ucraina. *XVI-a ediție a Conferinței Naționale de Psihiatrie*, Timișoara, Romania, 22-25 mai 2024.
- ✓ **Esanu A**. Stigma against people with depression in Medical Students. *XV-a ediție a Conferinței Naționale de Psihiatrie*, București, Romania, 07-10 iunie 2023.
- ✓ **Esanu A.** Stigma towards people with Depression. *23rd World Congress of Social Psychiatry "The social determinants of health/Mental Health and access to care"*, Bucharest, Romania, 25-28 octombrie 2019.

National

- ✓ **Esanu A.** Stigmatizarea persoanelor cu depresie în rândul studenților de la medicină. *Conferința Științifică Anuala „Cercetarea în Biomedicină și Sănătate: Calitate, Excelență și Performanță",* Chișinău, Moldova, 18-20 octombrie 2023.
- ✓ **Esanu A.** Stigmatizarea specialistilor din domeniul sănătății care sufera de depresie. *Conferinta a IV-a Stiintifico-Practica Nationala a Asociatiei Balint cu Participare Internationala "Profilaxia Sindromului Burnout",* Chisinau 2019, 04-07 aprilie 2019.
- ✓ **Esanu A.** Stigma towards people with depression. *International Conference of Applied Psychology „Current Affairs and Perspectives in Psychological Research"*, Moldova State University, Chisinau, Moldova, 29-30 noiembrie 2018.

ADNOTARE

Teza de doctorat „Factorii clinico-sociali în dezvoltarea fenomenului de stigma în depresie” abordează o problemă majoră de sănătate publică, cu implicații profunde asupra accesului la servicii de sănătate mintală, aderenței la tratament și calității vieții persoanelor afectate de depresie. Depresia este una dintre cele mai frecvente tulburări mintale la nivel global, fiind asociată cu dizabilitate funcțională semnificativă, risc suicidar crescut și impact socio-economic considerabil. În acest context, stigmatizarea depresiei reprezintă un factor determinant care contribuie la întârzierea solicitării ajutorului specializat, la subdiagnosticare și la întreruperea tratamentului.

Scopul principal al cercetării a fost identificarea și analiza factorilor clinici și sociali care influențează dezvoltarea și menținerea stigmei asociate depresiei, precum și evaluarea relației dintre stigmatizare și caracteristicile sociodemografice ale persoanelor investigate. Cercetarea a fost realizată în Republica Moldova, într-un context socio-cultural particular, marcat de acces limitat la servicii specializate de sănătate mintală și de persistența unor stereotipuri negative legate de tulburările mintale.

Metodologia studiului a inclus o abordare cantitativă, bazată pe utilizarea instrumentelor validate internațional pentru evaluarea stigmei asociate depresiei, în special Depression Stigma Scale (DSS). Analiza statistică a urmărit corelațiile dintre nivelurile stigmei personale și percepute și variabilele sociodemografice (vârsta, sexul, nivelul de educație, statutul socio-economic), precum și contactul anterior cu serviciile de sănătate mintală. Prelucrarea datelor a permis identificarea tiparelor de stigmatizare și a factorilor asociați acestora.

Rezultatele obținute evidențiază existența unor diferențe semnificative între stigma personală și stigma percepută, aceasta din urmă fiind mai pronunțată. Aceste constatări sugerează că, deși unele persoane nu manifestă atitudini stigmatizante directe, percepțiile privind atitudinile societății rămân predominant negative. Factorii sociali și culturali joacă un rol esențial în consolidarea stigmei, influențând comportamentele de evitare și reținerea în solicitarea sprijinului specializat.

Concluziile tezei subliniază necesitatea unor intervenții multidimensionale pentru reducerea stigmei asociate depresiei, care să combine măsuri de educație și informare publică cu reforme structurale în sistemul de sănătate mintală. Valoarea teoretică a cercetării constă în aprofundarea cunoașterii factorilor determinanți ai stigmei în context național, iar valoarea practică rezidă în formularea unor recomandări pentru politici publice și programe de intervenție orientate spre reducerea stigmatizării și îmbunătățirea accesului la servicii de sănătate mintală în Republica Moldova.

ANNOTATION

The doctoral thesis *"Clinical and Social Factors in the Development of Stigma in Depression"* addresses a major public health issue with significant implications for access to mental health services, treatment adherence, and quality of life among people affected by depression. Depression is one of the most prevalent mental disorders worldwide and is associated with substantial functional impairment, increased suicide risk, and considerable social and economic burden. In this context, stigma related to depression represents a key barrier to timely help-seeking, accurate diagnosis, and continuity of care.

The main objective of the research was to identify and analyze the clinical and social factors contributing to the development and persistence of stigma associated with depression, as well as to examine the relationship between stigmatizing attitudes and sociodemographic characteristics. The study was conducted in the Republic of Moldova, a socio-cultural setting characterized by limited availability of specialized mental health services and persistent negative stereotypes regarding mental disorders.

The research employed a quantitative methodological approach, using internationally validated instruments for measuring depression-related stigma, particularly the Depression Stigma Scale (DSS). Statistical analyses focused on identifying correlations between personal and perceived stigma and variables such as age, gender, educational level, socioeconomic status, and previous contact with mental health services. This approach allowed for a detailed examination of stigma patterns and associated factors.

The findings reveal a clear distinction between personal stigma and perceived stigma, with the latter being consistently higher. This suggests that societal norms and shared beliefs continue to reinforce negative representations of depression, even when individuals do not explicitly endorse stigmatizing views. Social and cultural factors emerged as significant determinants influencing stigma levels and help-seeking behavior.

The conclusions emphasize the need for multidimensional strategies to address depression-related stigma, combining public education and awareness-raising initiatives with structural improvements within the mental health care system. The scientific value of the thesis lies in its contribution to understanding stigma determinants in a national context, while its practical relevance consists in providing evidence-based recommendations for public policies and intervention programs aimed at reducing stigma and improving access to mental health care in the Republic of Moldova.