УДК 159.98:316.75:174

## EXPERIMENTAL STUDY OF PERSON-CENTERED PSYCHOTHERAPY IN SOMATOGENIC DISORDERS TREATMENT

(A study of chronic gastrointestinal diseases)

#### Alexandr F. Bondarenko

Kyiv National Linguistic University, Head of Psychological Department Velyka Vasylkivska St., 73, Kyiv, 03150, Ukraine E-mail: albond2012@gmail.com, https://orcid.org/0000-0002-9458-1787

#### Ksenia S. Maksimenko

National Academy of Internal Affairs, Professor of Legal Psychology Department
Solomyanska sq. 1, Kyiv, 03035, Ukraine
Ukraine, 03035, Kyiv, 1 Solomyanska sq.
E-mail: ksenia.maximenko@gmail.com, https://orcid.org/0000-0002-6102-2479
Received December 12, 2018

This article touches upon the problem of Person-centered psychotherapy in the treatment of specific psycho-emotional problems caused by chronic physical illnesses. The study involved the patients with chronic diseases of gastroenterological spectrum on the exacerbation stage. Total sample size was 144 people: 85 females (59.09%) and 59 males (40.01%) at the age from 24 to 59 y. The average duration of therapy ranged from 15 to 20 hours. A separate group of patients (15 people) were treated with medications prescribed by a psychiatrist in accordance with psychopathological report taking into account the basic diagnosis (anxiolytic, sedative, nootropic, anti-depressants).

Methods. At the sample selection and the final stages the MMPI, M. Luscher Colour Test and L. Szondi Test were applied. Before and after each therapeutic session express-diagnostics via SAM- techniques (self-esteem, activity, mood), in form of personal semantic differential was applied.

Results and conclusions. The most significant results in terms of clinical features (health, strengthening, stress reduction, reduction of scales' peaks, indicating the severity of the reactive state, positive dynamics of the lab tests, etc.) have been observed in the group of patients receiving concomitant (psychological, pharmacological and nosology-oriented) therapy. It may be assumed that various psychotherapeutic approaches should be considered as subsidiary, rather than principal, means of chronic illness treatment. Psychological methods proper would be useful for emotional abreaction, switching attention from the dominant physical suffering to the patient's personal resources, as well as self-presentation processes.

**KEY WORDS:** psychotherapy (effectiveness of), somatogenic disorder, chronic gastrointestinal diseases, psychoemotional condition, combined therapy

### PROBLEM STATEMENT

Modern psychotherapy in a broad sense is considered to be a most important part of present-day medical and paramedical activities. It gained now a considerable importance in solving a wide range of issues related to providing a psychotherapeutic care for patients. This mainly concerns the patients, whose diagnoses belong to the so-called "small psychiatry" and specifically to those who suffer from emotional problems caused by chronic somatic illnesses. The latter may not only negatively affect the patient's mental state, but also cause permanent personality disorder (which, according to the International Classification of Diseases (ICD-10), belong to V-Class and are designated by the code from F 60.0 to F 60.09). A great number of researchers are trying to answer the question, which models of psychotherapy (traditional and new ones ) and in what way may be considered as the most effective in coping with the psychological problems of a person who suffers from chronic somatic and psychosomatic diseases (Amosova, Samar, Vinnikov et al., 1995; Babich, 2008; Bulyubash et al., 2011; Stormy, 2006; Vorobiev, 2009; Raven, 2004; Greenwald, 2010; Kabanov, 1983; Karvasarsky, 2011; Scab, 2009; Korolenko, 2000; Korjagin, 1996; Kocharyan, 2002, 2010; Kulakov, 2007; Maksimenko, 2015; Markov, 2015; Mendelevich, 2005; Mikhailov et al., 2002; Moroz, 2010; Butts, 1997; Prostomolotov, 2007; Roslyakova, 2012; Samushiya, 2009; Thostov, 2006; Bittonetal, 2003; Von Wietersheim, Kessler, 2006.; Garcia-Vega, Fernandez-Rodriguez, 2004; Maksymenko, 2015, etc.). Thus,

the actual experience indicates the urgent need for studying the real possibilities of modern psychotherapy in application topsycho- and somatogenic disorders, which were caused by chronic painful physical conditions.

#### SUBJECTS, METHODS AND PROCEDURES

The study involved patients in the acute stage of the following chronic diseases of gastroenterological spectrum: various types of chronic gastritis with normal and increased gastric secretory function; those with secretory insufficiency: simple, catarrhal, hemorrhagic gastritis; those with chronic cholecystitisand angiocholitis (cholangitis) both with patients after cholecystectomy; also patients withgastric and duodenal ulcers, with gastroesophageal reflux disease, with chronic ulcerative colitis, including chronic colitis of various localization (sigmoiditis, proctitis, proctosigmoiditis), as well as irritable bowel syndrome.

Total sample size comprised 144 patients: 85 females (59.09%) and 59 males (40.01%) at the age from 24 to 59.

The initial psychodiagnostic examination of patients was performed using a short version of the MMPI test and LuscherColor Test. Officially the procedure was called the "current state assessment". At the end of the psychodiagnostic procedure, a psychologist briefly discussed the results with the patient, asking if he or she would be interested to work on "stress reduction" in individual or group form.

Those patients whose test psychograms were of the research interest and those who were willing to work with a psychologist had additional interviews with a "psychoneurologist" (as officially a psychiatrist was named). At a separate closed meeting with the project supervisor, a chief psychologist and a psychiatrist, the final decision was made whether to include this or that patient to a target cohort for providing a psychotherapeutic treatment. As a result, in the group of patients with a range from the hypochondriac type of response to the disease to the hypochondritic disorder, there were 12 people (6 men and 6 women); in the range from the disturbing type of response to anxiety disorder - 16 people (2 men and 14 women); in the range from the egocentric type of response to the hysterical (conversion disorder) - 5 people (1 woman and 4 men). In addition, for the 15 patients, certain findings were made that fit into the symptoms of somatic-autonomic disorder, or, more precisely, consistent with the pathosichological description of "general stress" (the traditional abbreviation - VSD). In the course of work, four patients from the target group were excluded from the causes of the researchers. Thus, out of 144 patients with somatic care, 59 patients with nonpsychotic personality disorders were selected. Subsequently, all subjects were randomly assigned to 4 psychotherapeutic groups, for which KBT was used, existential-humanistic approaches and combined psychotherapy. Each patient, who expressed the desire to participate in the psychotherapeutic work, passed L. Szondi diagnostic test (version adapted by Sobchik L.M.) and received a printout of a psychological conclusion that created a natural occasion for the beginning of a person-oriented therapy. Additionally, each participant filled out the express-diagnostics scales on the basis of SAM-test (self-esteem, activity, mood), in form of personal semantic differential. In this way the research team carried out a constant monitoring of the patient current state, which increased the interest of the participants to psychotherapeutic sessions and at the same time provided certain feedback to the team of psychologists. Due to the specifics of the research project the psychologists have not been informed with the super task of this study. Thus, we complied with conditions relating to the requirements of the double-blind method.

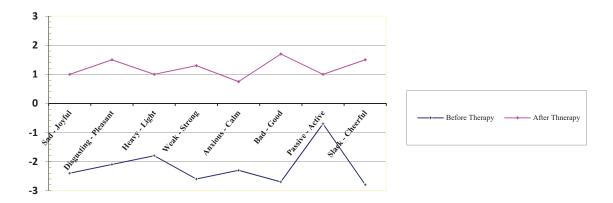
The psychotherapeutic session was conducted daily from 16.00 to 17.30 six times per week (daily except Sunday). The average duration of psychotherapy for patients ranged from 15 to 20 hours. Some people (9) expressed the desire to continue individual psychotherapy after discharging from hospital, and received from 6 to 10 hours of additional psychotherapy. The certain difficulties were imposed by the norms of the bedhours, actually allocated per patient in modern hospitals (e.g. no more than 14 bed-days per patient in the gastroenterological department). During our project, the actual length of patient hospital stays rarely reached three working weeks. It may be argued that such psychotherapeutic treatment actually corresponds to the life style of modern megalopolis inhabitant, and fits into the canons of short-term psychotherapy. Psychotherapy

included: existential-humanistic approaches, cognitive-behavior techniques (in both group and individual forms) and combined (psychopharmacological) therapy. Special attention had to be paid to that part of the cohort of targeted patients (15 people) who took special medications prescribed by psychiatrists in accordance with the psychopathological diagnosis as it was agreed with the attending physician, taking into account the main diagnosis. In general, a prescription drug list included anti-anxiety drugs (Afobazol, Strezam, Xanax, etc.); sedative (Glycine, Glycide, etc.); nootropicdrugs (Noophen, Pantogam, Nootropil, Glycine, etc.), as well as a group of antidepressants of both plant origin (Life-900, Gelarium-Hypericum, Deprim), and of the SSRIsgroup (Ciprolex, Citalopram, Fluoxetine) and SOSSN (Venlafaxine, Duloxetine), and in case of secondary insomnia - Sonovan (Zopiclone), Vita-melatonin or, if necessary, Agomelatine (Melitor). The main research aspect was that this part of the patients' cohort was divided into two groups. The first group (7 patients) has some limitations in taking the above mentioned drugs, and the second one (8 patients) took part in psychotherapeutic sessions in addition to the prescribed medications. The difficulty lied in the fact that, as a rule, most of these drugs are appointed for a period much longer than the timing of the psychotherapy itself. Moreover, the effects of many of them begin to manifest themselves in 10-12 days, so the objective mismatch between psychotherapeutic interventions and pharmacodynamics, taking into account the "respondent-nonrespondent" criterion, was another important nuance of this research project. In order to ensure effective treatment, special attention was paid to feedback issues, including delayed feedback via e-mail, and the possibility, if necessary, to contact the project supervisor, and then -the psychiatrist for a prescription, etc (in order to save space, the article will present only two rows of indicators: SAM and MMPI).

#### RESULTS AND ANALYSIS

# I. The dynamics of patients' psycho-emotional and physical condition after the Existential-Humanistic psychotherapy.

At the first stage of the psycho-emotional condition assessment, the presence of changes in the subjective assessment of the patient's emotional state was analyzed with the use of the semantic differential technique. Since the values of the scales of the modified version of the semantic differential, proved to be sufficiently homogeneous, the average values for the whole group of each scale had been analyzed. As it is seen from the graph of Figure 1, the dynamics of the indicators for each of the scales is sufficiently explicit. The most obvious improvement of well-being observed on the scale of "bad – good". The patients felt more relaxed and comfortable after a group therapy.

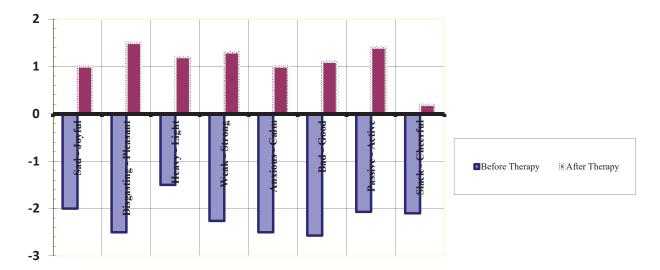


**Figure 1.** Dynamics of subjective assessment of patient's emotional state (mean values on the scales in the group) before and after the group therapy course in existential-humanistic paradigm (based on semantic differential).

It should be noted that the indicators for all scales in the diagnosis after a course of psychotherapy vary within no higher than the average level of severity (1.5 points on the scales of SD). High rates, showing the

positive subjective assessment of the patients are not available. That gives us the ground for the assumption that psychotherapeutic measures exclusively are insufficient to improve the psycho-emotional state of patients.

The dynamics of the subjective assessment of the patient's physical condition is also positive and sufficiently expressed (Figure 2). The indicators for all scales tended to a positive pole, but also within the framework of the average level.



**Figure 2.** Changes in the subjective assessment of the physical condition of the patients (mean values on the scales in the group) before and after the Existential-Humanistic group psychotherapy (based on a modified version of the semantic differential).

It should be noted that after the course of existential-humanistic group psychotherapy the patients continued to complain of headaches, mood swings, fatigue and lack of motivation for professional activity.

II. Analysis of the results obtained by using the Mini-Mult Test at the beginning and at the end of Existential-Humanistic psychotherapy.

A nonparametric criterion of signs was chosen for 35 patients. The Wilcoxon signed-rank test served as an auxiliary method of statistics.

The differences were estimated among the indicators for each scale of the Mini-Mult Test. Since the nonparametric criteria allow us to estimate only one pair of variables characterizing the dependent groups for one analytical stage, the tables of analysis results describe each pair separately. At the end of the group Existential-Humanistic psychotherapy, the average scores on the scales of Reliability and Hypochondria decreased. This fact indicates positive dynamics of the psycho-emotional state of patients.

Statistically significant differences between the scores in the group of patients before and after the course of psychotherapy were identified on two scales: Reliability (Aggravation) and Hypochondria. The changes in the Reliability scale among patients were manifested in the reduction of the tendency to hyperbolize the symptomatic characteristic of their physical state. Moreover, the desire to emphasize the severity of the physical state was leveled as a result of psychotherapy (Fig. 3).

A predominance of the passive personal position, a high level of awareness of the existing problems through the prism of frustration and a pessimistic assessment of its prospects, the tendency to a negative perception of the world due to illness, inertness in a decision-making were noticed at the beginning of group psychotherapy. But at the end of the group Existential-Humanistic psychotherapy the focus shifted towards positive understanding of the future prospects, new meanings of life, further actions aimed at restoring health and lifestyle changes.

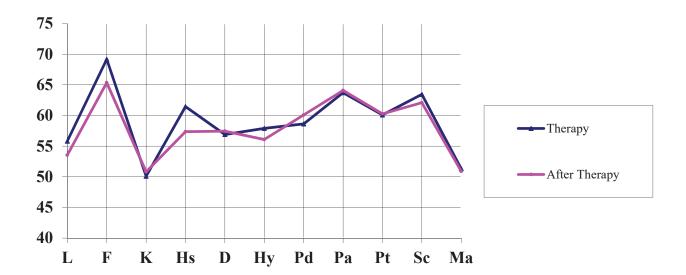


Figure 3. Dynamics of indicators on the Mini-Mult scales before and after the Existential-Humanistic psychotherapy.

III. The dynamics of patients' psycho-emotional and physical condition after the Cognitive-Behavioral psychotherapy.

At the first stage of the psycho-emotional state assessment, the presence of changes in the subjective assessment of the patient's emotional state was analyzed using the semantic differential technique. Since the values of the scales of the modified version of the semantic differential, proved to be sufficiently homogeneous, we analyzed the average values for the whole group of each scale.

As it is seen from the graph on Fig. 4, the dynamics of the indicators for each of the scales is quite explicit. The most obvious improvement of well-being observed on the "Weak – Strong" scale. The patients feel more confident, balanced and "nice" after the course of group therapy. But it is worth noting that the figures for all the scales in the diagnosis after the psychotherapeutic course vary within no more than the average level of expression (1.5 points on the SD scales). The high rates, reflecting the positive subjective assessment of the patients are not available, that gives us the ground for the assumption that psychotherapeutic measures alone are insufficient to improve the psycho-emotional condition of patients.

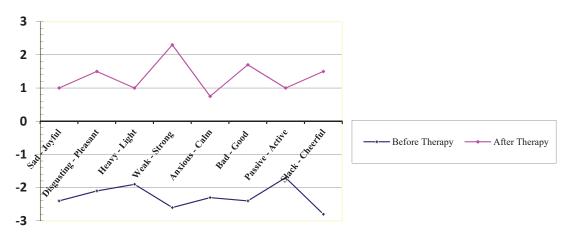


Figure 4. Dynamics of subjective assessment of patient's emotional state (mean values) before and after a course of Cognitive-Behavioral group therapy (based on semantic differential).

The dynamics of the subjective assessment of the patient's physical condition is also positive and quite persuasive (Figure 5). The indicators for all scales tended to a positive pole, but also within the framework of

the average level. The most obvious improvement of mental well-being can be observed on the "Weak – Strong" scale. The patients felt the increase of strength and self-confidence, the readiness for the change of behavior after the course of Cognitive-Behavioral group psychotherapy.

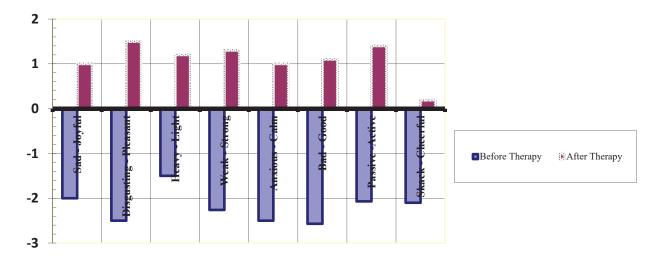


Figure 5. Dynamics of subjective assessment of the patient's physical condition (mean values) before and after a course of Cognitive-Behavioral therapy (based on a modified version of the semantic differential).

But in general, after a course of Cognitive-Behavioral group therapy, the patients continued to complain of apathy, lethargy, lack of motivation for professional activity.

Psychotherapy Cource

Table.

The mean values of indicators of the Mini-Mult scales in the group of patients at the end of combined therapy course

IY. The dynamics of patients' psycho-emotional and physical condition at the end of Combined

	L_a	F_a	K_a	Hs_a	D_a	Hy_a	Pd_a	Pa_a	Pt_a	Sc_a	Ma_a
Valid N	8	8	8	8	8	8	8	8	8	8	8
Missing	0	0	0	0	0	0	0	0	0	0	0
Mean	53.54	65.36	50.81	56.36	54.45	55.09	57.09	61.09	60.27	63.09	50.9
Std. Deviation	3.8043	6.91	6.32	4.80	6.36	6.56	5.82	6.59	7.49	8.51	7.942
Minimum	48.00	54.0	40.0	50.0	47.0	44.0	45.0	55.0	48.0	52.0	40.00
Maximum	65.00	69.0	55.0	61.0	64.0	61.0	62.0	70.0	63.0	72.0	59.00

After the combined therapy course the average indexes on **eight scales** have decreased: Lie (L), Hypochondria (Hs), Hysteria (Hy), Depression (D), Psychopathy (Pd), Paranoid (Pa), Psychasthenia (Pt).

The changes in the Aggravation scale were manifested in the reduction of the tendency to hyperbolize the symptomatic characteristic of patients' physical state. Moreover, the desire to emphasize the importance of the physical state was leveled as a result of psychotherapy.

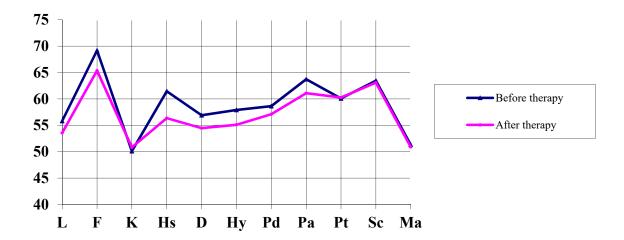


Figure 6. Dynamics of indicators on the Mini-Mult scales before and after the group psychotherapy combined with psychotropic medications treatment.

As seen from Fig. 6, the positive dynamics of the psychoemotional state in the group of patients after the course of a combined psychopharmacotherapy is evident (in comparison with patients after the course of purely group psychotherapy). A predominance of a passive personal position, a high level of awareness of the existing problems through the prism of frustration and a pessimistic assessment of its prospects, the tendency to a negative perception of the world due to illness, inertness in a decision-making, sharpness of feelings were noticed at the beginning of group psychotherapy combined with psychotropic medications treatment. But at the end of a combined therapy course the focus shifted towards positive understanding of the future prospects, new meanings of life, further actions aimed at restoring health and lifestyle changes.

#### **CONCLUSION**

The study provides grounds for the conclusions about the possibilities of modern personality-oriented psychotherapy in somatogenic treatment. It was taken into account that the content of complaints, the objectification of psychoemotional condition indicators, as well as its own subjective assessment among patients with gastroenterological diseases in the five experimental groups had some common features at the beginning of psychotherapeutic and pharmacological treatment: high level of anxiety due to deep unconscious fears of uncertainty about prospects which creates a constant feeling of danger and insecurity; decreased activity aimed to restore the former way of life; conversion of psychological problems into physical symptoms; low frustration tolerance, passive life position, increased level of alexithymia and blocked need for affiliation with increased interpsychic activity.

At the end of psychotherapeutic treatment, the most significant positive dynamics of psychoemotional condition was observed in the group of patients after psychopharmacotherapy. Significant positive changes were detected within Lie, Hypochondria, Hysteroid, Depression, Psychopathy, Paranoia and Psychasthenia scales of Mini-Mult Test. Such protection mechanism as "flight into illness" when the disease serves as a screen that disguises the desire to shift responsibility for existing problems to others, has also been reduced in this group of patients. The hyposthenic indices decreased. After a combined therapy, the patients rated their health condition as "good", they were able to identify the prospect of treatment. The tolerance to stress and frequency of social contacts increased which positively affected their emotional sphere and allowed them to receive satisfaction in their personal lives and professional activities. The state of disadaptation significantly decreased, as it was showed in Mini-Mult profile by increasing the 7-th scale.

The results of this study might be interpreted as follows: the most significant results in the clinical sense, related to the improvement of well-being, reduction of general stress, decrease of "aggravation of state",

reduction of scales indicating the degree of severity of reactive state of patients, as well as the improvement of laboratory tests, were observed in groups of patients after a combined (psychological, pharmacological and nosological oriented) therapy.

Thus, it follows that at present time there is no evidentiary reason to make categorical judgments about the sufficiency of psychotherapy itself, especially about its pathogenetic mission in all those situations when it is not exclusively about processes related to psychogeny. At the same time, it is worth noting that various psychotherapeutic approaches somehow perform additional helpful functions related to processes of emotional reaction, switching attention from dominant somatic suffering to patient's personal resources, and also influencing the image of self as well as processes of self-presentation. In other words—expanding the patient's consciousness, which deprives the experience associated with disease. The latter circumstance, we believe, contributes to the release of the patient's resources both at the level of organism (nervous, endocrine, immune systems) and at the level of personal "Self" and opens up additional opportunities for ensuring the effectiveness of healing process and restoring health in all senses of this complex phenomenon.

#### **ACKNOWLEDGMENT**

We thank our colleagues for their friendly and very professional support.

#### REFERENCES

- Amosova, K.M., Samar, S.A., Vinnikov, D.M. et al. (1995). Використання психотерапії в комплексному лікуванні та реабілітації ревматологічних хворих [Use of psychotherapy in complex treatment and rehabilitation of rheumatologic patients]. In Питання діагностики та лікування: збірник наукових праць [Problems of diagnosis and treatment: collection of scientific works] (p.83). Kiev. (in Ukrainian)
- Babich, V.V. (2008). Психотерапія у комплексному лікуванні розладів адаптиції у хворих з гострим інфарктом міокарду (Psychotherapy in the complex treatment of adaptation disorders in patients with acute myocardial infarction). (Ph.D. Thesis). Retrieved from http://www.irbis-nbuv.gov.ua/cgi-bin/irbis\_nbuv/cgiirbis\_64.exe?C21COM=2&I21DBN=ARD&P21DBN=ARD&Z21ID=&IMAGE\_FILE\_DO WNLOAD=1&Image file name=DOC/2008/08bvvgim.zip. (in Ukrainian)
- Bitton, A., Sewitch, M.J., Peppercorn, M.A. et al. (2003). Psychosocial determinants of relapse in ulcerative colitis: a longitudinal study. *Am. J. Gastroenterol.* 98(10), 2203–2208.
- Buljubash, I.D., Morozov, I.N., Prihod'ko, M.S. (2011). Психологічна реабілітація пацієнтів з останніми спинальною травмою (Psychological rehabilitation of patients with the last spinal trauma). Samara: Izdatel'skij Dom «Bahrah-M». (in Ukrainian)
- Burno, M.E. Клиническая психотерания [Clinical psychotherapy]. 2-editon (2006). Moscow: Akademicheskijproekt.
- Voronov, M. (2004). Психосоматика: практическое руководство [Psychosomatics: A Practical Guide]. Kiev: Nika-Centr. (in Russian)
- Garcia-Vega, E., Fernandez-Rodriguez, C. (2004). A stress management programme for Crohn's disease. *Behav Res Ther*. 42(4), 367–383.
- Gas'kov, V.S. (1995). Психотерапия у больных гипертонической болезнью с учетом ведущих репрезентативных каналов [Psychotherapy in patients with hypertensive disease, taking into account the leading representative channels]. Український вісник психоневрології [Ukrainian Herald of Psychoneurology]. 3(1), 166–167. (in Ukrainian)
- Grojsman, A.L. (1997). Медицинская психология: Лекции для врачей слушателей курсов последипломного образования [Medical psychology: Lectures for doctors students of postgraduate education courses]. Moscow: Izdatel'stvo Magistr. (in Russian)
- Kabanov, M.M., Lichko, A.E., Smirnov, V.M. (1983). Методы психологической диагностики и коррекции в клинике [Methods of psychological diagnosis and correction in the clinic]. Leningrad: Medicina. (in Russian)
- Kaplan, H.I., Sadock, B.J. (1994). Клиническая психиатрия [Clinical psychiatry], Vol.1. Moscow: Medicina. (in Russian)

- Karvasarskij, B.D. (2011). Клиническая психология [Clinical psychology] (4th ed.), Moscow: Piter. (in Russian)
- Korostij, V.I. (2009). Место психотерапии в комплексном лечении непсихотических психических расстройств у больных с психосоматическими заболеваниями [The place of psychotherapy in the complex treatment of non-psychotic mental disorders in patients with psychosomatic diseases]. *Медицинская психология: науч. мед.* журнал [Medical psychology: scientific medical journal]. 4(2–3), 139–141. (in Russian)
- Korolenko, C.P., Dmitrieva, N.V. (2000). *Социодинамическая психиатрия [Sociodynamic psychiatry]*. Moscow: Akademicheskij Proekt; Ekaterinburg: Delovajakniga. (in Russian)
- Koryagin, Yu.A., Rashevskii, A.I. (1996). The Work of a Psychotherapist in Rehabilitation Department for Cardiological Patients. In *The Issues of Clinical and Social Psychology and Psychiatry*. *Abstracts* (pp. 93–94). Dnepropetrovsk. (in Russian)
- Kocharjan, A.S., Saprykina, E.V., Saprykin, A.V. et al. (2002). The personality of patients with neurotic disorders: sex role. *Mezhdunarodnyj medicinskij zhurnal*, 2, 67–70.
- Kocharjan, A.S. (2010). Эффективность методики психодиагностики сложных многоуровневых психологических образований (на примере симптомокомплекса маскулинности/фемининности) [Effectiveness of psychodiagnostics methods of complex multi-level psychological formations (on the example of the masculinity/feminine symptom complex)]. Журнал практического психолога [Journal of practical psychologist]. 17, 163–174. (in Russian)
- Kulakov, S.A. (2007). Практикум по психотерапии психосоматических расстройств [Workshop on psychotherapy psychosomatic disorders]. SanktPetersrurg: Rech'. (in Russian)
- Kutova, N.V., Markova, M.V. (2015, May). Хронічний панкреатит як модель моделі соматичної хвороби з психотравматичними наслідками [Chronic pancreatitis as a model of a somatic disease model with psychotraumatic consequences]. In Український вісник психоневрологіі: Тези науково-практичної конференції з міжнародної діяльності «Сучасні підходи до діагностики, терапії та реабілітації посттравматичних стресів [Ukrainian Journal of Psychoneurology: Abstracts of the Scientific and Practical Conference on International Activity "Modern Approaches to the Diagnosis, Therapy and Rehabilitation of Post-Traumatic Stress"], 23(2), (pp. 111–112). Harkiv, Ukraine. (in Ukrainian)
- Maksimenko, K. (2015). Mental Conditions. In S.D. Maksimenko *Genesis of Personality Existence*. (pp. 271–293). Montreal: Accent Graphics Communication.
- Maksimenko, K.S. (2015). Личностно-ориентированная терапия эмоциональных расств при соматогениях [Person-Oriented Therapy for Emotional Disorders with Somatogens]. Kiev: Izdatel'skij Dom "Slovo".(in Russian)
- Mihajlov B.V. (Ed.) (2002). Психотерания в общесоматической медицине: Клиническое руководство [Psychotherapy in General Medicine: A Clinical Guide]. Harkov, Ukraine: Prapor. (in Russian)
- Mendelevich, V.D. (2005). Клиническая и медицинская психология: учебное пособие [Clinical and medical psychology: study guide] (5th ed.). Moscow: MEDpress-inform. (in Russian)
- Moroz, S.M. (2010). Психопатологія і патопсихологія інвалідності внаслідок соматичних хвороб (феноменологія, механізми формування, прінципи соціальної реабілітації) [Psychopathology and pathophysiology of disability due to somatic diseases (phenomenology, mechanisms of formation, principles of social rehabilitation]. (Doct. Thesis). Retieved from: http://www.irbis-nbuv.gov.ua/cgi-bin/irbis\_nbuv/cgiirbis\_64.exe?C21COM=2&I21DBN=ARD&P21DBN=ARD&Z21ID=&IMAGE\_FILE\_DO WNLOAD=1&Image\_file\_name=DOC/2010/10MSMPPR.zip. (in Ukrainian)

- Obuhov, Ja.L. (1997). Глубинно-психологический подход в психотерапии психосоматических заболеваний [Deep psychological approach in psychotherapy of psychosomatic diseases]. Moscow: RMAPO. (in Russian)
- Prostomolotov, V.F. (2007). Психосоматичні розлади (клініка, терапія, профілактика): керівництво для психологів і лікарів [Psychosomatic disorders (clinic, therapy, prevention): a guide for psychologists and doctors]. Odessa, Ukraine: KP OGT. (in Ukrainian)
- Rosljakova, V.A. (2012). Клинико-психопатологическая характеристика депрессивных расстроек непсихотического уровня у больших с опухолями челюстно-лицевой области [Clinical and psychopathological characteristics of depressive disorders of the non-psychotic level in large patients with maxillofacial tumors]. Медицинская психология: науч. мед. журнал [Medical psychology: scientific medical journal]. 7(1), 85-88. (in Russian)
- Samushija, M.A., Zubova, I.V. (2009). Нозогении (психогенные реакции) при раке молочной железы [Nosogenic (psychogenic reactions) with breast rake]. Психические расстройства в общей медицине [Mental disorders in general medicine]. 1, 24–29. (in Russian)
- Shheglov, L.M. (2006). Психология соматического больного [Psychology of the somatic patient]. *Медицинская психология: науч.-мед. журн. [Medical psychology: scientific med. Journ.*], 1(3), 22–28. (in Russian)
- Thostov, A.Sh. (2006). Психотерапевты его магия [Psychotherapist and his magic]. *Psihologija*, 3(1), 103-109. (in Russian)
- Von Wietersheim, J., Kessler, H. (2006). Psychotherapy with chronic inflammatory bowel disease patients: A Review. *Inflamm Bowel Dis.* 12(12), 1175–1184.
- Vorobjov, V.V. (2009). Психологічні й сексуальні чинники в генезі мастопатії та їх психокорекція [Psychological and sexual factors in the genesis of mastopathy and their psychocorrection] (Doct. Thesis). Retieved from: http://www.irbis-nbuv.gov.ua/cgi
  - bin/irbis\_nbuv/cgiirbis\_64.exe?C21COM=2&I21DBN=ARD&P21DBN=ARD&Z21ID=&IMAGE\_FILE\_DO WNLOAD=1&Image\_file\_name=DOC/2009/09vvvgmp.zip. (in Ukrainian)