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- to provide a platform for dissemination of ideas and development of academic and non-academic network of MHC researchers, practitioners and policy-makers
- to promote high quality research most specifically on MH in developing countries and countries in transition
- to investigate multi-disciplinary, transdisciplinary and multicultural aspects and solutions related to MHC

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Virtual round care model in a Covid-19 geriatric sub intensive unit

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Abstract

Introduction. Telepresence provides clinicians the ability to monitor patients as well to communicate with all the members of the healthcare staff. Covid-19 Units cope with high complexity in providing care and an integration amount the care team and the patients' relatives should be carried out to obtained successful outcomes and preventing complication. Virtual rounding (VR) has been successfully applied to cope with this task in the last 2000 years in medical units. Covid-19 patients due to safety rules may be prone to isolation and lack of communication with their family.

Purpose. The aim of our study was to evaluate the effect of structured virtual round protocol in a geriatric Covid-19 unit on anxiety and depression for the patients and their relatives.

Methodology. All the patients admitted to the geriatric Covid-19 unit from 1 February 2021 to 30 April were studied. Inclusion criteria to the study were the followings: no severe cognitive impairment (MMSE ≥ 24) or neuro sensorial deficits; informed consent to participate to the study. Forty-nine 49 (75% of patients) met the inclusion criteria. All the subject who were found to be eligible to the study underwent a VR standard protocol of care. VR was consisted with: 1) a video call with a tablet device conducted by a psychologist that established a cooperative communication between the health care staff (nurses and MD, their relatives) at the bed sides; 2) a video call with the patient's relatives in which it was clearly explained the standard care and the role of each healthcare member was also included. Anxiety and depression levels were assessed for the patients at baseline after the end of the protocol by the Hospital Anxiety and Depression Scale (HADS). Patients' relatives were investigated for depression at baseline and after the end of the protocol by the Beck Depression Inventory- Primary Care (BDI-PC). The Beck Depression Inventory for primary care has seven items with each item rated on a 4-point scale (0–3). It is scored by summing ratings for each item (range 0–21). Items are symptoms of sadness, pessimism, past failure, loss of pleasure, self-dislike, self-criticalness, and suicidal thoughts and wishes. The Hospital Anxiety and Depression Scale (HADS) is a self- assessment scale found to be a reliable instrument for detecting states of depression and anxiety. The anxiety and depressive sub-scales are also valid measures of severity of the emotional disorder. The questionnaire comprises seven questions for anxiety and seven questions for depression, and takes 2–5min to complete. For both scales, scores less than 7 indicate non- cases, 8-10 mild, 11-14 moderate, 15-21 severe. JMP software by SAS (v.16) was used for the statistical analysis.

Results. The present study included forty-nine 49 patients (67% male), mean age of 69.9 ± 14.7 years with one relative for each patient. The average mean of the hospitalization for each patients was 17.6 ± 5.7 days The mean VR duration time was 60 ± 5.5 minutes. VR showed a significant decrease in both Anxiety and depression for patients: (HADS Depression baseline 10.6 ± 3.1 vs 6.9 ± 2.7 end $p < 0.01$) (HADS Anxiety baseline 10.2 ± 3.4 vs

6.8 \pm 3.0 end $p < 0.01$). VR has also reduced depression in the relatives of patients (BDI-PC 3.6 \pm 2.4 vs 1.9 \pm 1.9 $p < 0.01$).

Discussion. VR has reduced anxiety and depression in patients hospitalized in a sub-intensive COVID 19 unit and it also has been found to be effective in decreasing depression in the relatives of these patients

Limitation. However, the study has some possible limitations considering its small size and that it was mono centric

Conclusions. Our data confirm the efficacy of VR in the sub-intensive care setting. This evidence supports the key role of a multidisciplinary team, focusing on the importance of social and psychological support during the hospital stay.

More studies will be consequently necessary to better validate the importance of VR as a standard care tool in intensive/sub-intensive care units for the elderly patients

Keywords

Virtual Rounding, Telehealth, Psychology, Mental health, Covid-19.

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Conflict of interest

Authors declare no conflict of interest

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Emotional potential in the children's team

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Abstract

Introduction. Increased interest in the study various groups that perform joint activities in social, organizational, economic, sports psychology and work psychology nowadays. The urgency is: the fast changing forms of work organization based on the high economic interest and responsibility all members of the group; relative production-economic and organizational-managerial independence of labor collectives, which contributes to the self-organization development and self-government forms improvement; the team fitness issue is becoming more and more relevant.

Purpose. The purpose of the paper is to investigate the group psychological work influence on the children emotional intelligence development and the processes of psychological stability and cohesion in a sport team.

Methodology. We used the comprehensive diagnosis of the child's personality and status in the group (n=622). The main accent was made on the level of emotional intelligence (EQ) and sociometric status of the child. The main hypothesis: the higher the child's EQ level, the higher its sociometric status. The standard PASW Statistics method was used to process the statistics.

Results. Sociometric tests: 223 children had a low sociometric status (36%); 242 - satisfactory and within the norm limits (39%), 75 - above the average (12%), and only 81 had a high sociometric status (13%). The EQ level indicators (integrative level): 317 respondents had a low EQ level (51%); 218 - the average level (35%) and only 87 respondents had a high EI level (14%).

Conclusions. After the implementation of the author's program for adaptation and the child emotional intelligence development, we have results: Sociometric test: only 56 children have lower sociometric status (9%); 144 - satisfactory and average (23%); 223 - above average (36%) and 199 - high sociometric status (32%). EQ level (integrative level), we also have positive changes: only 111 respondents remained with a low level of emotional intelligence (18%); 386 developed the level of emotional intelligence to the average (62%) and 125 had a high level of emotional intelligence (20%)

Keywords

mental health, emotional intelligence, interpersonal relationships, cohesion.

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Young health management sphere

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Abstract

Introduction. Health at 10% depends on the medicine level, 20% - on the environment state, 20% - on heredity and 50% - on lifestyle. The healthy lifestyle is forming by: value awareness, conscious attitude, health support; healthy lifestyle; spirituality development; saving and promotion health life. Ukrainian adolescents' health self-assessment is lower than their peers in Europe: every five teenager consider his health mediocre or bad (27%); every third teenager has smoking experience. One in ten teenagers first smoke a cigarette at 11 or earlier, 7% smoke every day; one in seven among 11-year-old and 76% 17-year-old have alcoholic drinking experience; every nine teenagers (aged from 11 to 13 years) tries cannabis at least once. Among 12 million reported sexually transmitted diseases 3 million occur among adolescents.

Purpose. The purpose of the paper is to study the youth awareness level in the health field; to create a youth health center model.

Methodology. An extensive literary review of relevant articles and youth health research reports for the period 2009-2020, was performed using Medline, PubMed and Google databases, with the following key words: "the Ukrainian youth health state, the number of chronically ill among Ukrainian youth, the bad habits spread in the Ukrainian youth environment, youth for a healthy lifestyle". We used a descriptive cross-sectional survey with open-ended and closed-ended questions about attitude to a healthy lifestyle (n = 688).

Results. Youth consider the health as the most comprehensive definition, which is enshrined in the scientific literature (67,7%). Family remains the most influential social institution for young people today. Unemployment, low medical care level and high HIV/AIDS rates are the most important health concerns.

Conclusions. Influencing the safe behavior formation factors is defined, the young people attitude the healthy lifestyle and the mentioned factors have been described. The model of the Youth Health Support and Conservation Centre is presented

Keywords

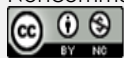
Educational management, safe behavior, healthy lifestyle, the model of Health Centre, city community.

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Intellectual disabilities in preschoolers: mental health determinants during the prenatal, natal and postnatal development stages

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Abstract

Introduction. A person's mental health is a successful performance of a mental function, the result of which is a productive activity, establishing relationships with other people and an ability to adapt to change and cope with adverse life circumstances. Particularly acute is the issue of the potential negative impact of impaired development on the mental health and social functioning of children with mental and physical disabilities.

Purpose. The purpose of the paper was to identify correlations between the mental health indicators of mentally retarded preschoolers and the specifics of the prenatal, natal and postnatal stages of their development.

Methodology. Analysis of special medical, psychological and pedagogical literature; comparison and systematization of research material to determine the mental health indicators of preschoolers of mild and moderate degrees of mental retardation; mathematical methods of statistics.

8 **Results and Discussion.** These studies show that the events of the prenatal/natal period have a significant impact on the further life of the child. It is a clear fact that close interaction between the mother and the unborn child is confirmed (the child learns to perceive the world together with the mother). However, for the relatively harmonious mental health and social functioning of a child with mental retardation, the mother's behavior after the birth of the child is of paramount importance. This study does not reveal the entire specifics of mental health indicators of MRP, because the article presents the results of a study covering senior preschool age. School-age children were left out of consideration.

Conclusions. The obtained results confirm the conditionality of mental retardation by negative factors of prenatal, natal and postnatal stages of development. It is important to correctly diagnose the existing manifestations of mental health disorders exactly at the preschool age, in order to implement appropriate measures for correction and development

Keywords

mental health, preschool age, mental retardation, psychophysical development disorders, determinants.

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Group identity as a prognostic factor of mental health in preschool children

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Abstract

Introduction. Victim stance of an individual may arise due to negative social relationships (Chojnacka, 2020) and may be associated with the experience of loneliness (Barbaro, 1999); lack of close friends and rejection by peers; lack of play partner and negative relationships in childhood (Chase, 1999). However, studies investigating the peculiarities of group identity development and the problem of loneliness in preschool children are insufficiently presented in the modern scientific literature. In this article, the phenomenon of victimhood, the experience of acceptance or rejection by a group of peers are considered in the context of preschooler's mental health genesis.

Purpose. The aim of the study is to determine the features of group identity development in preschool children in kindergartens based on the examples of children and the memories of adults.

Materials and methods: an anonymous survey with open-ended and closed-ended questions was used (n = 247). The participants of the survey were parents of preschoolers attending modern preschool educational institutions (n = 140) and respondents who attended kindergarten as children (n = 107, aged 12 to 55). They were asked to evaluate the organization of groups in kindergarten; the features of interpersonal interaction of children; meeting the needs of children in child-care facilities; the main functions of the kindergarten and their level of trust in educators.

Results: Kindergarten is a second important environment where a child continues to develop his group identity and ego-identity, and not just a place where children stay when parents are at work. Children who have difficulty interacting with their peers often face aggression from peers, experience feelings of loneliness, but not always receive help from their teachers. The majority of respondents (75.7%) answered that the experience of communication in kindergarten influenced their emotional state, self-esteem and communicative competence at school.

Conclusions: The peculiarities of children's group identity in the preschool period are experiences of interest in interaction with a certain group of peers, the desire to be accepted and at the same time hostility towards or lack of interest in other peers. A significant percentage of experienced loneliness among modern children (35.5%) and adults (27.1%) who attended kindergarten more than 30 years ago indicates that this problem has existed for decades and requires more attention from scientists. Absence of play partners and frequent conflicts with peers lead to low self-esteem, fear of communication with children, other toxic experience and, as a consequence, to the risks of victimization in the future

Keywords group identity, preschoolers, loneliness, mental health, preschool institution

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Introduction

Identity means the integration of all previous identifications and self-images (Erickson, 1996).

Group identity is associated with identifying with a particular group or community and begins to form in early childhood (Erickson, 1996); and is the first form of social identity (Chorna, 2020). It is associated with identifying oneself with a particular group or community (Hornostay, 2010). At the same time, there are almost no studies dedicated to group identity development peculiarities in preschool children. In modern psychology, very few works are devoted to the problem of loneliness, especially in preschoolers. This may be due to the underestimation of the impact of loneliness in a small group on a child's mental health and personality development at an early and preschool age.

However, a developed sense of community allows children to create an adequate scheme of the world around them. The children learn to cooperate and communicate in a group, compare themselves with others, develop their self-esteem, and learn to relate their desires to the norms accepted in society. At the same time, with an underdeveloped sense of community, children begin to form neurotic complexes, inferiority complexes, which make them anxious, insecure, envious, conformist and tense. One of the main personal qualities that helps children to survive the slings and arrows of life and overcome hardships is the ability to cooperate and collaborate with others (Adler, 2016). Therefore, the harmonious development of the child's group identity is very important, because a huge number of destructive phenomena that we can observe recently — cruelty, aggression, adolescent and child suicides — have their origins in early and preschool age, which can be determined by an educational strategy of a family as well as by problems in group identity development.

Purpose

The Purpose of the study is to determine the features of group identity development in

preschool children on the examples of children and adults.

Methodology

An anonymous survey with open-ended and closed-ended questions was used (n = 247). The participants of the survey were parents of preschoolers aged 4–6 who attend modern preschool institutions (n = 140) and respondents who attended kindergarten as children (n = 107, aged 12–55). They were asked to evaluate the organization of groups in kindergartens; features of interpersonal interaction of children; meeting the needs of children in child-care facilities; the main functions of kindergartens; their level of trust in educators.

Results

The results of the pilot study show that respondents aged 34 to 45 (50.5%) and 26 to 35 (33.6%) took the most active part in the survey. Such interest in the study may be associated with a general increase in parents' awareness of children's mental development and personal interest of respondents in psychologically safe social and emotional environment in preschool institutions.

Children group organization. In the majority of kindergartens (62.9%) attended by preschoolers, the number of children in groups varies from 16 to 20 or even more; in 25.7% — from 11 to 16; in 8.6% — from 5 to 10. This is a large number of children per one or two adults, as it is almost impossible to monitor the psychological state of each child and timely address problematic situations when a conflict between children arises.

Features of interpersonal interaction of children in kindergartens. The analysis of preschoolers' parents' responses showed that children aged 4–6 express a strong desire to belong to a certain group: 85.6% of children prefer to communicate with a certain group of peers; 51.1% of children in the group have peers with whom they do not want to communicate. At the same time, the answers of adults show similar results: more than 30 years ago, most children in kindergartens also preferred to interact with a certain group of peers (58.1%), and there were children with whom no one wanted to interact (49.5%). The

preservation of this trend indicates that in a small group of kindergarten, children are divided into subgroups not chaotically, but according to certain preferences. Children develop sympathy, a strong interest in certain peers, and dislike or alienation from other children. Preschoolers with whom peers refuse to interact may suffer, feel lonely, which in the future increases the risk of maladaptation in the school community. The unmet children's need to be accepted and be a part of a group increases the risks of joining online groups, which can be life-threatening.

It has been found that in a modern kindergarten, every 10th child often faces aggression from peers and complains about their loneliness. Children who feel lonely in the group say they are not accepted by their peers: "no one is friends with me" (13.3%), "I have no friends" (6.7%), "other children play with me a little" (11.1%), "I am insulted" (4.4%), "usually I play alone" (20%). An interesting fact was that 27.1% of respondents who mentioned their own experience of attending a kindergarten (most respondents attended it more than 30 years ago) also noted feelings of loneliness (5.6% of respondents – always, and 21.5 % – often). They noted that they felt lonely because they "had few friends in the group" (21.8%), "were insulted by other children" (12.9%), "were insulted by teachers" (19.8%), "missed their parents" (67.3%).

At the same time, the analysis of respondents' answers shows that almost half of the respondents do not know whether a teacher helps their child to overcome difficulties in communicating with peers: 45.6% of respondents cannot say whether a teacher helps their children find contact with peers, i.e. quality communication between teachers and parents is absent; 7.8% believe teachers don't help their children; 15% say their children do not need help and only 31.1% state that teachers help the children establish contact with peers. Analyzing the experience of adult respondents, we found that most respondents also did not receive sufficient help from a teacher in building friendly relationships with peers when they needed it (29% – never, 20.6% – sometimes received support).

This coincidence may indicate that neither thirty years ago, nor even in modern preschool institutions, due attention is not paid to the development of group identity of preschoolers. Lack of sufficient communication experience in children often

leads to negative consequences in the child's personal development (Bozhovych, 1995). This means that some children feel particularly unhappy, and their self-esteem may be low, which will lead to victimization at school.

The level of trust in teachers. Most parents do not have full confidence in the staff of kindergartens attended by their children: 67.1% of parents said that the installed online surveillance would have a positive effect on their trust in the teachers, and 32.9% of respondents would no longer trust. It can be assumed that parents who do not need video surveillance have good contact with the teachers, their children like to attend kindergarten, they have a warm emotional relationship with the teachers and know how to positively resolve conflict situations or know that they can get help from an adult.

Meeting the needs of children in kindergartens. The majority of preschoolers' parents indicate that the most important need of their children is the development of communication skills for successful interpersonal interaction with peers (50.6%). The minority of parents rated the following criteria as the most important: "develop school skills" (14.7%), "learn self-care skills" (14.0%). Many parents would like their child's teacher to pay more attention to the development of conflict resolution skills in children. Recalling their experience in kindergartens, the majority of respondents, in terms of significance for them from 1 to 5 points, put the attitude of teachers and friends in the first place, which confirms the importance of acceptance by peers.

Discussion

The majority of respondents (75.7%) answered that the experience of communication in kindergarten influenced their emotional state, self-esteem and communicative competence at school. Recalling their own experience in kindergartens, the vast majority of respondents (82.3%) said that having friends was an important criterion for their positive emotional mood. Respondents who had a positive social and emotional experience in kindergarten said that it affected their positive self-esteem (23%), they learned to resolve conflict situations with peers (15.9%), they easily adapted to school (43.9%). Those who had a negative experience indicated that they had a negative self-esteem (8.4%) and fear of communicating with peers

(18.7%). The results suggest that kindergarten is the second important environment where the child continues to develop his/her group and ego-identity, and not just a place where children stay while their parents are at work. The process of individual's awareness of belonging to a group was studied by the authors of the theory of social identity H. Tajfel and J. Turner. This process, which they called "group identification", is that a person, identifying her/himself with a group, seeks to evaluate it positively, thus raising the status of the group and their own self-esteem. Group identification is a dispositional formation, i.e. a setting for belonging to a certain group. It regulates person's behavior in a group and consists of three components — cognitive (a person's awareness of belonging to a group and comparing his/her group with other groups), emotional (experiencing his/her belonging to a group in the form of different feelings) and behavioral (responding to others from the position of his/her group membership, not from the standpoint of an individual).

However, the studies addressing the peculiarities of group identity development and the problem of loneliness in preschool children are scantily represented in the modern scientific literature.

The limitations of our research is the use of only one research method – questionnaires, but we plan to continue studying the group identity of preschoolers and use a range of additional methods: observation, interviews etc. The strength of the research is the opportunity to get acquainted not only with the feedback of modern children attending kindergarten, but also with the experience of adults who attended kindergarten in their childhood. This proves the need for changes in approaches to raising children in kindergartens: paying attention to the development of group identity and helping children who have difficulty building friendships and/or feel rejected by peers.

The practical value of the study is that the results can be used in trainings for preschool teachers and for improving their professional skills on the development of group identity in preschool children. The research materials can also be used to develop policies for governmental institutions for the purpose of reorganizing preschools.

Conclusions (and Future Work)

The formation of the child's personality in preschool is characterized by active development of group identity, which is manifested in the child's experiences of interest in interacting with a certain group of peers, desire to be accepted and at the same time hostility to or lack of interest in other peers. At the same time, the approach to raising children in kindergarten is not aimed at supporting preschoolers who have difficulty interacting with peers, experience loneliness or often face aggression from peers. Helping children in problematic situations depends on the initiative and/or competence of teachers. In fact, it is more like a lottery, children who attend kindergarten have no guarantee that they will be provided with the necessary help and support in case of difficult situations with peers. Lack of play partners and negative relationships in childhood, as well as lack of friends and rejection by peers lead to painful experiences and risks of victimization in the future. The high percentage of loneliness experienced by modern children and adults who attended kindergarten more than 30 years ago indicates that this problem is not given the necessary attention. At the same time, the positive development of group identity of preschool children depends on the help of an adult in building friendly relations, development of skills of constructive conflict resolution, attention to children's emotional state and quality feedback from educator to parents.

Prospects for further research will focus on the development of group identity of preschool children in a small group of kindergarten, including finding and overcoming the causes of childhood loneliness and peer rejection, as prevention of school victimization and mental health disorders in the future.

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Conflict of interest

The author declares that she has no conflict of interests.

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Analysis of current approaches to the treatment and quality of life improvement in patients with gastroesophageal reflux disease in case of its combination with the syndrome of undifferentiated connective tissue dysplasia.

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Abstract

When the structure of the connective tissue is disturbed, the probability of developing pathology of the internal organs increases. The gastrointestinal tract is one of the systems that is most often involved in the pathological process in the case of such disorders. Due to its mesenchymal origin, the esophagus is one of the first to suffer.

Normalization of mineral metabolism, correction of immunological and bioenergetic status are the main tasks in the treatment of such patients. Therapy with magnesium drugs, vitamins, anabolic drugs, β -blockers, aldosterone antagonists, and amino acid drugs should also be used for this purpose. Patients in this group should also take drugs that contain vitamin D3.

Keywords

quality of life, undifferentiated connective tissue dysplasia, gastroesophageal reflux disease.

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Introduction

Undifferentiated connective tissue dysplasia (UCTD) refers to unclassified systemic autoimmune pathologies that have common clinical and serological manifestations with certain connective tissue diseases (CTD) but do not meet any of the criteria for their classification (Mosca, Tani, Vagnani et.al., 2014).

The natural evolution of UCTD has not yet been definitively established, and according to the results of eleven years of observation of such patients, about 62% of them continue to

suffer from it, 24% have reverse development, and 14% developed specific connective tissue disease (CTD) (García-González, Rodríguez-Lozano, Bustabad, Ferraz-Amaro, 2017).

Patients with UCTD are more susceptible to adjuvant factors, including proximity to factories, plants, wearing metal implants, vaccination. One of the systems most often involved in the pathological process in UCTD is the gastrointestinal tract, and among its organs in one of the first places - lesions of the esophagus, which is probably due to its mesenchymal origin (Bodolay et al., 2003).

Design/Methodology/Approach

The aim of the study was to summarize the existing knowledge about modern approaches to treatment in patients with gastroesophageal reflux disease on the background of the syndrome of undifferentiated connective tissue dysplasia while proposing an action plan to improve their quality of life.

Based on the obtained data, the authors aim to raise the awareness of interested health professionals and create a basis for further research.

Results and discussion

Treatment of gastroesophageal reflux disease (GERD) involves focusing on those pathological conditions that contribute to the strengthening of pathogenetic links of development and the appointment of antireflux therapy.

Drugs of choice for GERD pharmacotherapy are antisecretory agents and primarily proton pump inhibitors (PPIs) (Sawada, 2020; Sharma, Yadlapati, 2020; Surdea-Blaga, 2016). Two ways can also be used to increase the effectiveness of treatment and the rapid elimination of symptoms, including the combination of PPIs with alginates, antacids, or prokinetics or increasing the dose of the drug (Januszewicz, 2019). The expediency of the use of pharmaceuticals aimed at protecting the mucous membrane of the esophagus is due to the pathogenesis of GERD, namely - cellular and molecular mechanisms of inflammatory changes in the mucous membrane of the esophagus. Healthy esophageal epithelium provides an effective barrier to permeability between reflux and esophageal nociceptors, as its cells normally have acid buffering and acid transport properties (Müller, 2019).

The phenomenon of "acid pocket" has been in the center of attention of acid-dependent pathology of the esophagus for more than a decade. Although its appearance postprandial is a physiological phenomenon, in patients with GERD it is usually larger and more proximal, so it may increase the tendency to acid reflux, especially if the lower esophageal sphincter (LES) is caused by a lack of its connective tissue components. It has been scientifically

confirmed that "acid pocket" as a dynamic phenomenon is a bad target only for acid-blocking agents (Chernobrovj, Melashchenko, Chernobrova, Ksenchyn, 2017). In such cases, it will be more appropriate to prescribe a complex of acid-suppressive therapy with an alginate-antacid combination, because according to international treatment protocols, it may be more useful than acid-suppressive therapy alone (WGO, 2015).

The Romanian Society of Neurogastroenterology conducted a systematic scientifically based analysis, according to which it concluded the benefits of adding to the PPI drugs aimed at protecting the esophageal mucosa. In particular, they note that the alginate-antacid combination is superior to both placebo and antacids for the treatment of mild reflux symptoms, and has proven to be an additional agent to PPIs for the treatment of persistent symptoms. Alginate-antacid complex, in addition, to quickly eliminating symptoms, gave almost no side effects, improved quality of life. American researchers Leiman, DA et al. (2017) in the systematized literature review data also draw attention to the higher efficacy of alginates for the treatment of symptomatic GERD, as opposed to placebo and antacids. «Gaviscon double action» has a unique mechanism of action, forming a gel-like barrier on the surface of the gastric contents, which prevents aggressive gastric contents from entering the esophagus.

According to scientific data, it was especially effective in the fight against postprandial "acid pockets". Even in cases of gastric contents entering the esophagus, alginates are ahead of it, protecting the walls of the esophagus from the negative effects of gastric contents. Studies by Muller M et al. (2019), which prove its effectiveness and safety and emphasizes the role of this alginate complex in combating the symptom of "night break", as a result of which the quality of sleep in patients improves. This study is also supported by a randomized clinical trial of Coyle C et al. (2017).

Concerning UCTD, from a clinical point of view, such a group of patients needs a differentiated approach to treatment and prevention technologies. For treating patients with such comorbid pathology necessary to take into account the pathogenetic mechanisms of its development and actively involve clinicians of various profiles. There are

currently no international UCTD treatment protocols that prescribe specific treatments. An important element of treatment is the proper nutrition of such patients with foods enriched with substances that are actively involved in connective tissue metabolism.

Normalization of mineral metabolism, correction of immunological and bioenergetic status are the main tasks in the treatment of such patients (Butkova, 2018; Mishchuk, 2019). Therapy with magnesium drugs, vitamins, anabolic drugs, β -blockers, aldosterone antagonists, and amino acid drugs used for this purpose (Solieiyko, 2014; Antunes et al., 2019). Also, patients in this group should use drugs containing vitamin D3, the lack of which leads to a deficiency of calcium, zinc, and disorders of calcium-phosphorus metabolism. And all this leads to disorders of connective tissue metabolism (Omelchenko, Mukvich, Lavrenchuk, 2017; Romash, 2019).

Micro- and macroelements, vitamins, as cofactors of matrix metalloproteinases, play an important role in the synthesis of the main structural proteins of connective tissue. In particular, Mg^{2+} affects the activity of enzymes involved in collagen formation, giving the connective tissue matrix elasticity and resilience.

Pyridoxine is also important for metabolic support of connective tissue function and stimulation of collagen formation (Solieiyko, 2014; 2018). Its deficiency leads to peeling of the skin, dandruff, eczema. Having the ability to affect the level of endogenous amino acids, it helps to normalize keratin, the main protein of the connective tissue of the skin, nails, hair. With magnesium and pyridoxine deficiency, connective tissue protein synthesis slows down (Omelchenko, Mukvich, Lavrenchuk, 2017).

In addition, vitamin B6 is a universal carrier of Mg^{2+} in the middle of the cell, providing its homeostasis. After all, Mg^{2+} deficiency increases the activity of matrix metalloproteinases (MMPs) which causes aggressive degradation of collagen fibers with subsequent loss of connective tissue strength.

Experimental work has begun in recent years to show that magnesium deficiency can also affect the development of GERD. Smooth muscle contraction is known to regulate vascular tone. And the balance of Ca^{2+} and Mg^{2+} ions maintain adequate blood flow and trophic of the submucosal

layer of the esophagus, provides post-epithelial protection of the mucous membrane (Akyüz, Mutluay Soyer, 2017). Therefore, the imbalance and/or deficiency of these ions can disrupt the processes of neuromuscular transmission and muscle contraction, which in turn manifests itself in the form of GER and duodenogastric reflux (DGR). Decreased magnesium concentration in the body contributes to a more severe course of GERD and reduced quality of life (Iudici et.al., 2017). At the same time, the dynamics of Mg^{2+} , Ca^{2+} , and MMPs activity under the influence of drugs containing magnesium and calcium were not studied in patients with GERD on the background of UCTD.

Conclusions

Therefore, there are currently no clear recommendations for the treatment of GERD on the background of UCTD. Recommendations for the correction of metabolic disorders in GERD on the background of UCTD are few and insufficiently substantiated. The frequency of such comorbid pathology indicates the need to find new ways of early diagnosis and correction of this process.

Conflict of interest

The author declares that she has no conflict of interests.

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The mental health of the Ukrainian nation as a driving force for economic growth

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Abstract

Introduction: Achieving a high level of social welfare requires investment in human capital, and its sufficiency and rational use is a necessary condition for the development of the state. The health of the nation as a factor of state formation and security of the state is a basic component of human capital and competitiveness of the country and is closely integrated with the economy, science, and defense.

Purpose: The purpose of our study is the system of protection and preservation of the mental health of Ukrainians, in the framework and context of economic development.

Methodology: The study was conducted based on statistical data of the Center for Medical Statistics of the Ministry of Health of Ukraine for the period 2016–2020. The following methods were used: analytical, medical statistics, comparative analysis, system approach.

Results: The incidence and prevalence of mental and behavioral disorders among the entire population of Ukraine, as well as among the adult population, working-age and old age, depending on the place of residence and sex, were studied and analyzed.

Conclusions: The problems of the current state of mental health of Ukrainians are studied and the ways of solving these problems are suggested. The retrospective dynamics of the dependence of the level of psychological health of the population and economic development of the country are analyzed. The tendencies of prevention and improvement of the level of public awareness about the role of mental health on the example of the leading countries of the world are analyzed.

Keywords

mental health, mental and behavioral disorders, protective factors, risk factors, human capital, national health, state security, economic development.

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Introduction

Mental health is the foundation of a nation's prosperity, as in any democratic society, citizens play a major role in the development of a nation. Mental health

cannot be limited to just being defined as the absence of mental illness or disorder. It is an all-encompassing concept of the psychological well-being of people. If a country wants to develop economically, its citizens must have an appropriate

psychological reserve. Citizens need to be mentally healthy to participate in activities such as leadership elections, working, family management, communication, outside of daily activities. These requirements can be too complex for people and can be stressful if the country's mental health system is weak. Governments should develop mental health services that are accessible, appropriate and non-discriminatory with a moral and political point of view.

Over the 30 years of Ukraine's independence, public interest in mental health issues has increased, and certain reforms have begun. In January 2020, Ukraine was selected as a priority country for the World Health Organization's (WHO) Special Initiative for Mental Health (2019-2023). The Ministry of Health sought to use funding and technical support provided by the WHO Special Initiative to complete and operationalize the Mental Health Plan. The plan emphasizes the need to raise awareness of mental health, combat discrimination and human rights violations of persons with mental health problems, increase access to health care through deinstitutionalization and development of services at the community level, and improve the professional competence of health personnel.

Since joining the initiative, Ukraine has experienced renewed political commitment to mental health policies and the expansion of mental health services. In turn, Ukraine's GDP growth rate averaged 0.04 percent between 2010 and 2021 and the country experienced faster economic growth. However, once the government was ready to move on to a new phase of health care reform in April 2020, the national focus shifted due to a change in government leadership. More importantly, the acceleration of the COVID-19 pandemic has dramatically changed the priorities of the healthcare system.

Thus, mental disorders remain the second leading cause of the burden of disability in the country in terms of disability-adjusted life years and is estimated to affect 30% of the population. According to the World Health Organization in Ukraine, more than 1.6 million citizens are registered at psychiatric and narcological clinics and units nationwide. Only last year, about 185,000 of Ukrainians were diagnosed with mental health conditions and disorders. However, most

people affected may not seek help at all due to lack of trust in the old system, stigma and other barriers. This has a significant impact on economic development as people continue to suffer from mental health problems and are unable to live fulfilling lives. Stigma, discrimination and human rights violations are still widespread. Consequently, the transformation and improvement of the mental health care system in Ukraine is necessary as well as following the best practices of European countries and their adaptation to the mentality.

Design/Methodology/Approach

The study was conducted based on statistical data of the Center for Medical Statistics of the Ministry of Health of Ukraine for the period 2016–2020. The following methods were used: analytical, medical statistics, comparative analysis, system approach.

Results and discussion

If we look at the correlation between the level of income of countries and mortality, then the connection can be traced directly: the richer the country, the lower the mortality rate and the higher the life expectancy. This relationship was shown back in 1996 by Lent Pritchett (World Bank) and Larry Summers (later the US Treasury Secretary and Economic Advisor in the Barack Obama administration), and it still does not change - so it is observed in the data for 2018-2020 biennium. But while we see a positive correlation between the gross domestic product and life expectancy in the data, it does not imply a causal relationship. Indeed, for example, not only an increase in GDP can lead to an improvement in the health of citizens, but an improvement in the health of a nation can lead to economic growth.

The easiest way to show causality is to look at exogenous shocks (or, as economists say, use natural experimentation) affecting either health or GDP and income, and assess how these shocks will indirectly affect other indicators.

Looking at the impact of health on economic growth, there are several historical examples. For example, the John Bates Clark Medal winner Daron Acemoglu and his co-author, MIT Professor Simon Johnson, showed that the invention and widespread use of

antibiotics in the 1930s – 1940s. led to an increase in life expectancy and a decrease in mortality, but did not greatly affect the change in GDP. On the other hand, Professor Jeffrey Sachs and his co-author John Luc Gallup (Harvard) have demonstrated that aggressive malaria control in sub-Saharan Africa would lead to GDP growth in this area by about 2.6% per year.

But another relationship is no less interesting: how can a drop in income affect health? Here, natural experiments for analysis are the previous economic recessions and crises, which occurred with enviable regularity in all parts of the world.

Over the past twenty years, several studies have separately analyzed the impact of recessions and crises on mortality. (Romash, Vynnyk, 2019) However, their findings are heterogeneous and differ significantly for developed and developing countries. One of the most famous studies in this area was a series of works by Christopher Room of the University of Virginia, published in the early 2000s. Rum showed that in the United States in the last quarter of the twentieth century. the rate of increase in mortality decreased along with the rate of economic growth. During the recession, people gave up many bad habits. As a result, mortality from a group of diseases caused by the consequences of smoking and being overweight, as well as from cardiovascular and some other diseases, decreased, reducing overall mortality. Later work found a similar effect.

However, other studies in recent years have not found a significant correlation between mortality and recessions in developed countries. So, the same Rum in a later work, in which he expanded the period of analysis of his previous studies, showed that now, on new data, up to 2010, there is no longer a negative relationship between mortality and recessions. Similar results were also obtained in the work of the 2019 Nobel laureates Abhijit Banerjee and Esther Duflo et al, which used data on the income and health of the population of France in the late 19th and early 20th centuries.

In contrast to developed countries, in developing economies and especially in rather poor countries, during economic crises and recessions, there is often an increase in mortality. There are several mechanisms to explain this phenomenon.

First, as a rule, crises hit developing countries much harder than developed ones. In them, the GDP is shrinking more, and the incomes of the population and living standards are falling more, and poverty is growing more. Secondly, the health of the population can be threatened due to the low level of social protection and medical support, as well as credit restrictions, lack of savings among the poor, which impede the ability to smooth out economic shocks: as a result, a deterioration in the quality of nutrition, low attention to preventive health services; and the lack of funds for medicines and health care payments by the poor.

All this in times of crisis leads to an increase in mortality. In addition, the deterioration of medical care due to a shortage of staff and a decrease in public spending on the health care system in particularly severe economic downturns also lead to an increase in mortality during recessions and crises.

According to the survey, 2.3% of Ukrainians in 2020 suffered from mental and behavioral disorders - 1,706,070 people (prevalence - 3989.9 per 100 thousand of the total population, compared to 2019, this figure decreased by 0.2 %). The primary morbidity of the entire population of the country remained at almost the same level: growth in 2020 by 0.06% compared to 2019 (2020 - 319.0 per 100 thousand of the total population; in 2019 - 318.8). The prevalence of mental and behavioral disorders was higher among rural residents (4358.3 per 100 thousand of the population) than among urban residents (3823.1), by 14% (this trend continued in previous years). It should also be noted that the prevalence in rural areas tended to increase in 2020 by 0.3% compared to 2019. In contrast to the prevalence, the incidence of mental and behavioral disorders was higher among urban residents (324.5 per 100 thousand of the corresponding population) than among rural (306.7), by 5.8%, and also the incidence rates of city residents tended to increase compared to 2014 by 1.2% (2019 - 320.7 by 100 thousand population, 2020 - 324.5). This is most likely due to better access to health care for city residents.

In the structure of the prevalence of diseases of the adult population (18 years and older), the share of mental and behavioral disorders in 2020 was 2.5% (4280.7 per 100 thousand adults) and tended to increase compared to 2019 by 0.1 % (2019 -

4276.8 per 100 thousand), the primary incidence remained at the same level (295.3 per 100 thousand adults). At the same time, in rural areas the prevalence (4847.8 per 100 thousand of the corresponding population) and primary morbidity (304.4 per 100 thousand) were higher than similar indicators among the urban population (4032.4 and 291.3 per 100 thousand). Among the adult male population of the country, mental and behavioral disorders also prevailed over women (men: prevalence - 6046.2 and morbidity - 380.2 per 100 thousand of the population; women: prevalence - 2826.8; morbidity - 225.4).

In 2020, mental and behavioral disorders made an even greater contribution to the structure of the prevalence of diseases among the working population - 3.55%. Thus, in the structure of the prevalence of diseases of the most economically active, productive part of the population, the share of mental and behavioral disorders was higher than in the structures among the total population, adults and the population older than working age, in addition to the prevalence and primary morbidity tended to increase. In 2020, the prevalence increased compared to 2019 by 0.25% (2019 - 4795.7 per 100 thousand working population; 2020 - 4807.7). Primary morbidity also tended to increase by 0.69% (2019 - 331.7 per 100 thousand; 2020 - 334.0).

For comparison, we present data on the mental health of the population of Europe. According to the WHO (2017), 27% of the adult population of the European Union, Iceland, Norway and Switzerland between the ages of 18 and 65 had at least one mental disorder last year (including problems related to the use of psychoactive substances, psychosis, depression, anxiety and eating disorders). This is a large number (at least 83 million people) of human loss from ill health, but it is incomplete because it does not include people over 65 years of age. In addition, psychoneurological disorders are the third leading cause of loss of life due to DALY (Disability-adjusted life year) in Europe, accounting for 15.2% of cardiovascular disease (26.6%) and malignancies. (cancer) - 15.4%. Three of the fifteen leading diseases that account for the burden of illness (DALY) are mental disorders, namely: unipolar depressive disorders are the third leading cause (3.8% of all DALYs); disorders caused by alcohol consumption - sixth (2.9% 3.8% of all

DALYs); Alzheimer's disease and other dementias are the fifteenth cause of DALYs (1.9% of all DALYs). In most countries of the European Union, 35-45% of absenteeism is due to mental health problems. In addition, mental disorders make the largest contribution to the chronic pathology of the EP population. According to the WHO, psychoneurological disorders rank first among the diseases of the European population by years of disability (YLD), which is 36.1% of all chronic diseases. The proportion of depressive disorders is 11–15% of all YLDs, which rank first, becoming the leading chronic disease in Europe; Alcohol-related mental disorders rank third in Europe (6.4% of all YLDs); anxiety disorders - sixth (4% of all YLDs), Alzheimer's disease and other dementias - ninth (3% of all YLDs); migraine is eleventh (2.7%), schizophrenia is fifteenth (1.8%), and bipolar disorder is seventeenth (1.6% of all YLDs) [4, 5, 7, 8].

The level of a person's mental health at any given time is determined by several social, psychological, and biological factors. The main determinants of the growing number of mental disorders in the modern world and according to research: population density, urbanization, destruction of the environment, the complexity of production and educational technologies, increasing information pressure, increasing the frequency of emergencies (emergencies), including hostilities, deterioration of physical health (including reproductive), increase in the number of brain injuries and birth injuries, intensive aging of the population (Romash,2020). Mental health is also affected by socio-cultural trends: weakening of family and neighborly ties and mutual assistance; a sense of alienation from state power and the system of government; growth of material needs of "consumer" society; the spread of sexual freedom; rapid increase in social and geographical mobility. The most vulnerable in terms of predisposition to mental disorders are groups that are in an unfavorable life situation and the least provided with resources.

The impact of economic downturns on mental health should also be addressed, as any economic crisis is a very dangerous period for the mental health of both the general population and those directly affected by the crisis, during which the prevalence of mental disorders, drunkenness, suicide and deaths from alcohol abuse is

increasing. Therefore, the governments of all civilized countries need to improve mental health measures. The economic crisis and the state of mind of the population are closely linked, ie the worse the economic situation, the worse the state of mental health. The economic consequences of mental disorders (expressed mainly in the form of reduced productivity) for the European Union are estimated at 3-4% of gross national product. Because serious mental disorders often begin in adolescence or adolescence, decreased productivity can be long-lasting. In the countries of the WHO European Region, mental disorders account for more than a third of all man-years lost due to disability (33%). Thus, economic distress affects the factors that determine mental health, resulting in weakening protective factors and increasing risk factors. The mental health of the working-age population is favorably affected by employment guarantees, the ability to manage one's work, and social support at work. On the contrary, financial difficulties (poverty) and social isolation are the main socio-economic risk factors for mental disorders. As an example, in the European Union, rising unemployment has increased alcohol abuse mortality by 28%. Thus, the economic crisis harms the health of the population, especially mental health, so the degree of impact of the economic crisis on the mental health of the population depends on political decisions. According to the WHO, the adverse effects of the crisis on mental health are counteracted by active labor market programs, as well as measures to support families, limit the availability of alcohol, debt relief programs, and universal access to mental health services.

In countries with well-developed social protection systems, economic decline has less of an impact on mental health. Data from Europe show that the economic crisis does not always exacerbate the health gap between different segments of the population. Governments need to focus on the priority needs of the most vulnerable, ensuring a high level of coverage for the poorest and supporting families at risk. An example is the dynamics of suicides in Sweden and Spain in 1980-2005. In the early 1990s, Sweden experienced a severe banking crisis, which led to a very rapid rise in unemployment, but the suicide rate during this time not only did not rise but even steadily

decreased. The situation is different in Spain, which experienced some banking crises in the 1970s and 1980s. As unemployment increased, the number of suicides increased, but when the unemployment rate decreased, the number of suicides decreased. Although there are many differences between Sweden and Spain, the main ones are the number of resources allocated to the social protection budget: family support, unemployment benefits, and health care. Thus, supporting social security at the state level can increase the resilience of communities in the face of economic shocks and reduce the impact that unemployment and the stress of economic decline have on mental health.

Current research shows that the impact of the economic crisis on mental health can be reduced by acting in five main areas: 1. Active labor market programs. 2. Family support programs. 3. Control over alcohol prices and their availability. 4. Primary care for people at increased risk of mental disorders. 5. Debt relief programs [6].

In most countries, especially low- and middle-income countries, mental health services are severely underfunded, both in terms of human and financial resources. Most of the available health resources are currently spent on specialized treatment and care for the mentally ill, and a minority on the integrated mental health system. Instead of providing care in the country's major psychiatric hospitals, mental health care should be integrated into primary health care, general care should be provided in general hospitals, and community-based mental health services should be developed.

Mental health promotion is one of the leading challenges of today and includes many actions to ensure respect for and protection of fundamental civil, political, socio-economic, and cultural human rights, which is the basis for mental health promotion, in the absence of security and freedom to maintain a high level. mental health is very difficult. Given that the mental health of the population is influenced by many factors that are outside the health sector in the traditional sense, it is governments that can provide and influence many of these factors at the political level, but we must not forget that The direction of public policy can have both positive and negative effects on the mental health of the population, so it should not be ignored and it

is necessary to calculate the impact of changes in social and economic policy on mental health. Socio-economic factors are closely interlinked, and policy changes within one sector have a cascading effect on other sectors, so it is advisable to monitor the impact of changes in economic and social policies on the mental health of the population. The state should pursue a national policy on mental health care with a focus not only on mental disorders but also on the broader aspects that contribute to the promotion of mental health. This should be taken into account in the strategies and programs of the public and private sectors, which should be comprehensive and multisectoral.

In addition, Ukraine, as a UN member state, must fulfill its tasks within the framework of the Sustainable Development Goals, which came into force on January 1, 2016, in which mental health is identified as a global humanitarian priority that needs to be strengthened, including by expanding mental health services. Priority ways to promote mental health, including WHO recommendations, include: early childhood interventions; child support; providing socio-economic opportunities for women; social support for the elderly; programs targeting vulnerable populations, including minorities, indigenous peoples, migrants and people affected by conflict and natural disasters; measures to promote mental health in schools; measures to promote mental health in the workplace; strategies in the field of living conditions; violence prevention programs; community development programs; poverty reduction and social protection of the poor; anti-discrimination laws and campaigns; strengthening the rights and opportunities of people with mental disorders and care for them [1-3].

Limitations of the study \ Strengths of the study:

The practical value of the results of our study can be used to address scientific and practical issues or problems aimed at improving the psychological health of the population, which in turn directly affects the economic and social development of the country.

Conclusions (and Future Work)

~~Thus, the state of mental health of the~~ population of Ukraine is unsatisfactory, in addition, there is a certain lack of both human and financial resources, there is no National Policy on Mental Health. The field of mental health needs to be reformed, the role of hospitals to be reduced and the primary health care to be strengthened, and universal access to mental health services to be guaranteed. If we talk about concrete steps to improve the mental health of the population of Ukraine with a view to the future strengthening of our state, given its current state and trends, all the events taking place in Ukrainian society, of course, without proper relevant national legislation and policy mental health with the creation of a functional system of public health, where mental health should occupy one of the leading places, the country can not do. Otherwise, mental health will deteriorate shortly, morbidity and prevalence will increase not only in mental and behavioral disorders, but also other classes of illness, mortality, suicide, and then you should not expect to increase life expectancy. Also, the state of mental health of the population requires the development and adoption of the State Program for Mental Health of the Population of Ukraine, which should be comprehensive and multisectoral with clear objectives for each industry within their competence.

Conflict of interest

The author declares that she has no conflict of interests.

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“Pay attention when turning a corner”: an overview of mental health policies in Brazil

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Abstract

Introduction: Brazilian's history of psychiatric care is complex and has some dark periods, but the country managed to get international recognition for its mental health policies in the last years. Those have been currently suffering setbacks.

Purpose: Review the historical context of mental health in Brazil, assessing the changes made after 2016, and carry out a critical analysis of the current inclination.

Methodology: literature and narrative review using official governmental documents.

Results and Discussion: Through its history, Brazil's had ups and downs in the care of mental health patients. After almost 30 years of policies that are centered around the individual, and not only the individual's disease, the hospitalocentric model of care has been subtly making its comeback, together with normatives that revoke rights before acquired and corroborates with segregation of the mentally ill.

Conclusions: The current changes in the Mental Health politics are not walking alongside the line with movements responsible for the implementation of a biopsychosocial care. It provokes and invites us to continue fighting for fair health programs and for the continuation of the Universal Health System.

Keywords

Mental health, mental health policies, psychiatric care

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Introduction

Brazilian's history of psychiatric care is complex and has some quite dark periods. Asylums were created at the end of the 19th century, and ended up sometimes serving as a lock up for the mentally ill as well as unrequired personas for the society back them. These places dealt with lack of structure and specialized health care workers, and the lack of full understanding of how the diseases worked and how to treat them only made it for a worse line of care. Around the 1970's, with delations of superlotations, lack of sanitary conditions and even plain violence in asylums getting to public attention, the

country found itself in the position of discussing new mental health politics, establishing therapeutic models that were both respectful and effective to the patients with psychiatric comorbidities. The need to surpass the old way of treating mentally ill patients brought the subject to discussions in the legislative, administrative and economic scopes, transforming itself in a important political point in Brazil in the 1980's.

By the same time, discussions and popular movements about a sanitary reform had started in the whole country, culminating in Universal Health System (SUS)'s creation and establishment, in 1988. SUS is a complex health system that ensures full, universal and

free access for the entire population of the country, including matters regarding mental health care. With the installation of this new format, Brazil started to close asylums and psychiatric bed in hospitals, and started to develop a line of care structured in the Psychosocial Care Network. This new structure deals with mental health without enclosure patients for decades in hospital beds, giving the patient the possibility of treatment through the Center of Psychosocial Attention, with longitudinal follow-up, the Residential Therapeutic Service, which brings the doctor inside the patient's home for visits, as well as entries in the Family Doctor's practice, Emergency Rooms and Psychiatric clinics. (Cavalcanti, 2019; Health Ministry, 2019)

Although there was a lot of challenges in establishing this new line of care, especially with fewer resources and a massive population in need of attendance, Brazil ended up getting international recognition for its new care network for mental patients, implementing health policies and successfully maintaining them for over thirty years. (Almeida & Lennon, 2010) Even between some resistances from opposed political parties over the years, there was an overall consensus over the psychiatric reform that took place in the country, making sure the system, while terribly underfunded, was still effective. However, in 2016, the government began to show a break in the relationship with such policies through regulations, ordinances, resolutions and other documents with proposals that led to a more inpatient than outpatient treatment approach. (Almeida, 2019) The changes brought by those documents shine light in the subtle dismantlement of a more humanistic line of care for mental patients, and makes for a deep overview of mental health politics in Brazil in the past and future to come.

Purpose

To review the historical context of mental health in Brazil through the years, and assess the changes in mental health politics that came after 2016. To understand the development and functioning of the Brazilian mental health support network, in addition to its benefits and weaknesses, and mainly, to carry out a critical analysis of the new mental health policies and how they interfere in the care and services already established.

Approach

This article considers documents that serve as substrate for the paradigm shift that affects and sickens the Brazilian health system, such as Constitutional Amendment No. 95 (EC 95), which converges to dismantling and subtly contributes to the solidification of a hospitalocentric, archaic and iniquitous model; resolutions of the Inter-Management Tripartite Commission of SUS; technical notes and any other official mechanisms concerning the research. However, given the dynamism of the contexts that make up the scenario where dismantling is institutionalized, the study is also based on the scientific literature by accepting previous analysis carried out by other authors. Sometimes, their arguments resort to historical research, addressing movements such as the psychiatric reform and the anti-asylum struggle, and sociological, understanding that the current government uses a neoliberal pretext to undermine popular achievements relevant to Brazilian public health (such as those crystallized at the II National Conference on Mental Health). It also includes analysis of the most varied discourses to understand the framework.

At last, it is emphasized that the collection that supports the synthesis below is not unpretentiously diverse. The heterogeneous nature of the former seeks to fill gaps that would not be filled only by normative texts. It is important to remember that political policies come from conflict and debate between subjects of various groups, being a social construction with disputed interests. Formal policies are made from a social context in mind, and it's resulted from clashes of positions and world views. In the end, politics are a live form, expressing momentary and dynamic agreements, exposing the historical contexts of each society (Mattos & Batista, 2015)

Thus, the discursive character and the free interpretation of intentionally selected information necessarily culminate in the making of a literature, historic and narrative review.

Results and Discussion

Initially, mental health in Brazil was based on a hospice-hospitalocentric system that is more focused on the mental illness itself than it is on the individual, emphasizing the treatment on social segregation. The milestone for the implementation of this

model in Brazil takes place with the inauguration of the Hospício Pedro II in Rio de Janeiro, which would become an example to spread throughout the country. However, this model generated the exclusion of individuals already marginalized from society, and created the stigma of "crazy" (Guimarães & Rosa, 2019; Guimarães, Borba, Larocca & Maftum, 2013)

In this line of care, asylums couldn't provide a cure or symptom control for patients, serving merely as a place to exclude those who were outside social standards, such as the mentally ill themselves and drug addicts, but also epileptics, prostitutes, homosexuals, among others. (Romash, 2019, Arbex, 2013) In addition to not receiving effective treatment, patients were deprived of their autonomy and were subjected to the therapeutic measures of the time, which, in addition to being invasive and without evidence of benefits, had a more punitive than therapeutic nature. Then, complaints of low quality of care and frequent occurrence of human rights violations began to be disseminated (Guimarães et al., 2013).

From 1978 onwards, individuals who until then were silenced began to gain space in the public sphere, even more so with the Federal Constitution of 1988, responsible for bringing social security to the country, allowing the working classes and those unable to work to initiate discussions about their interests. After the reconsolidation of Brazilian's democracy in the late 80's, there was margin for the reorganization of mental health policies, since the Constitution had already placed health as a "right of all and a duty of the State" (Guimarães & Rosa, 2019).

With health as a constitutional right, the government started a sanitarian and health reform and, within it, the Brazilian Psychiatric Reform (BPR). This movement consisted of expanding the mental health care team - that is, transcending psychiatry and the biomedical character of the specialty, building interdisciplinarity with the help of psychology, social work, sociology and other areas - and guaranteeing the rights of those who live with a mental disorder (Ramos, 2020). This required the downfall of the current hospitalocentric model, as well as the deinstitutionalization of asylum patients and the rise of substitute mechanisms, such as the Psychosocial Care Centers (PCC), which currently occupy the window of secondary care in the Psychosocial Care Network (PCN) (Duarte, Vertelo, Mariano & Marincek 2021).

Legally, psychiatric hospitalization is only an option if substitute services fail to assist the subject (Brasil, 2001) and in extreme cases with risk to the patient's life or those around them. Even so, this hospitalization would take place in psychiatric beds located in general hospitals, in detriment of what was established by the model prior to this community care, which admitted and encouraged beds in monovalent hospitals, favoring asylum foundations (Trapé Campos & Gama., 2015).

Until the emergence of Law No. 10.216 in 2001, which constitutionally subverted the order in force at the time and regulated a significant portion of the claims made during the anti-asylum struggle, some events were fundamental to the impulse of the BPR, such as the second Mental Health Conference in 1992. Although several milestones make up the gradation that culminated in positive structural consequences, the aforementioned event reinforced the democratic character of the reform by admitting the participation of society, including health service providers, users and their families, as well as other sectors involved. (Duarte et al., 2021).

On the other hand, the ongoing dismantling of Brazilian public health implements measures such as Constitutional Amendment 95/16, justified by the need to "guarantee the efficiency of public spending, while seeking to show fallaciously that it is possible to 'do more with the same resources'" (Mario & Barbarini, 2020) by establishing a "spending ceiling", making it progressively impracticable to maintain equity in health care for the Brazilian population as it weakens the Universal Health System and, proportionally, submits part of the care to the private sector. It should also be noted that, parallel to the general underfunding of the system, the budget for mental health in Brazil is still very small: from 2001 to 2016, the Ministry of Health invested annually, on average, 2.4% of the total health budget in mental health - less than half of the 5% recommended by the World Health Organization (WHO). (Oliveira, 2017).

As if the PCN was still marching through baby steps, not due to the lack of effort of the segments responsible for the BPR, from 2016 onwards, a legal setback began to be formalized. Among the dismantling routes, some normative documents stand out, starting with ordinance MS 3.588. This misrepresents the function to which the PCC were designated as it determines the

existence of a specific center capable of attending urgencies and emergencies of drug addicts, in order to break the limits of these services that, originally, should serve as secondary support to the primary care attention in Brazil. The recommendation that these centers be implemented around the drug use scenes violates the territorialization principle of SUS and goes against the community organization of the PCN itself. The addicts center ends up taking the user off the streets periodically, without the compromise of establishing the longitudinal line of care that PCCs provide by taking into account the entire life context of the patient, that goes far beyond their use scenario. In addition to the financing (or "financial incentive") of this service that disfigures the legitimate PCCs, it is also attacked by the reintroduction of the biomedical paradigm that gradually overcomes the individual's integrality and health as a biopsychosocial (Cruz, Gonçalves & Delgado, 2020)

The GM ordinance no. 3,992, published, as well as ordinance MS 3,588, in december of 2017, also provides for aspects that directly affect all services publicly offered by SUS. The text institutes a budget that values the autonomy of local managers without adequate delimitation regarding the application of these resources. In this way, the municipalities can, if they so decide, strengthen and finance services that are not in line with those desired by the psychiatric reform, such as monovalent hospitals and institutions that favor hospitalization as a therapeutic modality. Still, "resources destined to mental health can be reallocated in other areas of health" (Cruz et al., 2020).

Resolutions n. 35 and 36 of the Tripartite Inter-Management Commission seem to intend to regulate and ensure the proper use of resources destined to care in medium and high complexity, as well as assigning a deadline for the manifestation of managers regarding the realization of these services and obliging them to present "care production registered in health information systems" (Brasil, 2018). It is postulated that the absence of records or the presence of services that are not in operation should lead to "suspension of the transfer of funding resources". Based on these resolutions, ordinance no. 3,659 issued by the Ministry of Health determined the suspension of "transfers of financial resources destined to the monthly funding incentive of the components of the

Psychosocial Care Network" (Brasil, 2018), mainly including PCC's and Therapeutic Residential Services.

It is also crucial to remember that, concurrently with the suspension of these resources, there is an incentive to register private therapeutic communities in a transitory residential regime for drug addicts in a notice published in 2018 by the National Secretariat for Policies on Drugs. The traditional, outdated and ineffective proposals generally associated with therapeutic communities are highlighted, which permeate the use of "religious practice and abstinence as the only possible 'treatments' for users and people who use alcohol, crack and other drugs" (Ramos, 2020), discarding any real and scientifically "therapeutic" possibility within the communities.

There are also punctual attacks and setbacks, when it comes to the subjects of the Brazilian Psychiatric Reform. Ordinance 2434, published by the Health Ministry in August 2018, increases in the daily rate for admissions to psychiatric hospitals with a time longer than 90 days, something that was previously refuted in the 90's and early 2000's.

Finally, although not officially published, a technical note from February 2019 concludes a series of essays carried out in the legal sphere to return to the asylum paradigm. In addition to corroborating the presence of day hospitals in the PCN, it includes a psychiatric hospital and specialized outpatient units in it. These types of services are important and appreciated in the network; however, "their creation, disconnected from a specific territory and without adequate integration with the Psychosocial Attention Centers and other community devices, will inevitably lead to a fragmentation of the system and a disappearance of a continuity care". (Almeida, 2019) The description of fragile strategies in the treatment of addictive disorders again reinforces "an emphasis on institutional approaches and a systematic subordination of integrative community-based approaches" (Almeida, 2019).

Presidential decree n. 9,761 then approved the National Policy on Drugs. Although its goal is to be harmonized with the National Policy on Mental Health, it does not mention, for example, harm reduction as a therapeutic possibility to individuals who live with substance addiction. Furthermore, paradoxically, it dares to include in the same

article the aim to welcome in a therapeutic community and promote the social reintegration of people with problems arising from the use of alcohol and/or drugs. Thus, the set of measures implemented until then towards a disastrous past, which did not deserve to be contemplated after two decades of law nº 10,216, has been in force. The description of fragile strategies in the treatment of addictive disorders again reinforces “an emphasis on institutional approaches and a systematic subordination of integrative community-based approaches”. (Almeida, 2019)

Recently, at the end of 2020, the government agenda included a proposal to revoke several mental health ordinances published from 1991 to 2014, to carry out a remodeling and implementation of changes in mental health in Brazil. This proposal became known as “Repeal” and generated great commotion in social media for favoring the hospitalocentric model, supporting the increase of psychiatric beds in hospitals and in therapeutic homes. In addition, other examples of setbacks that the revocation brings are: extinction of the Back to Home Program, which started in 2003, supporting the social reintegration of psychiatric patients, and also of the Street Clinical Offices Program, launched in 2011 with the objective of providing medical care for homeless individuals; decreased supervision of psychiatric beds and discouraged transfer of hospital patients to community services and the flexibilization of voluntary admissions without the need to notify the Public Ministry. Although this proposal has not yet been approved, it is of great concern, since the latest ordinances are already going against the principles of the BPR and the repeal represents a threat to the psychosocial mental health model and the anti-asylum struggle in Brazil. (Polaiewicz, 2021; Antunes, 2020)

Limitations of the study:

The choice of a research method permeates the understanding that the object of study does not include the objectivity aimed at only systematizing a literary review. Politics, from the speeches of its formal representatives to its normative instruments, such as ordinances and laws, is the result of discourse. It is considered that every statement is inserted in a context, which, in the political sphere, is a social context.

Campos and Furtado (2020) highlight “the potential of using narratives to study situations in which the mediations between experience and language, structure and events, subjects and collectives, memory and political action are of interest”, corroborating the impossibility of the subject's absence before the analysis of the collected texts. Thus, it is intended to carry out a critical reading of the ordinances that have progressively instituted a retrograde mental health policy in Brazil.

Conclusions

Undoubtedly, the BPR was responsible for building a system that, despite being underfunded and, therefore, full of gaps, walked alongside the Universal Health System's principles and guidelines. The PCN and the community care model consider the subject and intend to assist all those who suffer, taking into account their psychosocial and economic individualities, aiming, and, above all, those who in most need. The expansion of therapeutic communities centers - from 10,586 to 23,382, according to the federal government's official website published on September 2021 -, as well as the large funding made available to these institutions, is an attack not only on the health of the Brazilian population, but to democracy. The segregation and punishments that must affect the portion of the population that tends to be “welcomed” by these entities is based on the need to corroborate the marginalization of groups that are, before being marginalized, weakened. Defending the BPR is defending the access of any individual who lives with a disorder to humanized, scientifically based and, ultimately, in fact therapeutic care.

The “Repeal”, although not yet approved, provokes and invites us to continue fighting for fair health programs. As Brazilian singer Gal Costa warned in 1969, in a song written by Caetano Veloso and Gilberto Gil during the military regime: “Pay attention when turning a corner // Attention, it is necessary to be attentive and strong”.

Conflict of interest

The authors declare no conflict of interests in regards to this review.

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Mental health of teachers in Ukrainian educational organizations

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Abstract

Introduction. Organizational educational environment may contain some destabilizing features (threats), which under certain conditions violate the psychological safety of a teacher and negatively affect his/her mental health and well-being in general. However, the effects of a destabilizing organization of professional activities on mental health and well-being have not been specifically studied, which necessitates appropriate research.

Purpose: to research the indicators of teachers' mental health in a destabilizing organization of professional activities.

Methodologi: The study was conducted at the Poltava M. V. Ostrogradsky Regional Institute of Postgraduate Pedagogical Education, Poltava V. G. Korolenko National Pedagogical University, Volodymyr Vynnychenko Central State Pedagogical University and Poltava State Medical University in 2018-2020. The sample size of 1817 respondents (Ukraine) included 388 men and 1429 women aged 20 to 57 years. The following methods were used: "Scale of threats to occupational health" (Dziuba, 2015) and "Scale of subjective well-being" (Sokolova, 2007) adapted by T. Dziuba. The study used mathematical and statistical analysis (descriptive statistics, correlation analysis) using IBM SPSS Statistics (version 21.0).

Results. It was found that an unstable level of emotional comfort is dominant (57.2%). This is shown by the following indicators: "self-assessment of mental health" 61.0%, "tension and sensitivity" 54.3% and "signs of psychiatric symptoms" 53.0%. Correlation analysis revealed a significant negative impact of the threat factors "daily and weekly overtime" ($p < 0.01$) and "overwork" ($p < 0.01$) on mental health. There is an increase in emotional discomfort in a situation of daily and weekly overtime and overwork. There is a positive correlation between the teachers' mental health and the indicator "significance of the professional environment" ($p < 0.01$).

Discussion. The dominance of the level of unstable emotional comfort among teachers may indicate they tend to unnecessary emotional experiences and dramatization of the situation including those related to health or professional activities. It may also indicate certain psychosomatic symptoms (excessive response to professional situations and failures, violation of sleep cycle, decreased overall activity, etc.). This trend shows that the high level of professional requirements causes stress and can lead to a variety of negative symptoms: burnout, dissatisfaction with work results, stress, health problems. Decrease of the general level of mental health of Ukrainian teachers in the situation of daily and weekly overtime causes them feeling difficulties in controlling emotions (indicators: "mood swings", "signs of psychiatric symptoms", "self-assessment of mental health"), constant worries about real and imagined professional situations (indicators: "self-assessment of mental health" and "satisfaction with professional activities"). High rates of emotional discomfort indicate the crises of professionalization and burnout.

Professional environment is extremely important for teachers' mental health. Professional support is a resource for activating and realizing the professional potential of teachers, optimization of intensive interpersonal interactions, making optimal decisions in situations of excessive professional and time stress.

Conclusion. The study showed that teachers' mental health in Ukrainian educational organizations is characterized by unstable emotional comfort and increased emotional discomfort, which is a consequence of unbalanced (destabilizing) working conditions: overwork, overtime. The obtained data motivates the need to conduct targeted psychotherapeutic and corrective work with teachers who demonstrate professional distress.

Keywords

mental health, psychological security in the educational organization, overwork, daily and weekly overtime.

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The overview of utilizing complementary therapy to relieve stress or anxiety in emergency department patients: animal-assisted therapy, art therapy, and music therapy

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Abstract

The Emergency Department could be a stressful environment for patients. Anxiety and depression may develop due to the atmosphere, in addition to patients' concerns for their health conditions. The condition could potentially affect the experience of the patient in the Emergency Department and the quality of life after the visit. Pharmacological therapy could be administered to the patients. However, adverse effects may be associated with the treatment. Less aggressive complementary treatment approaches are presented in this article. Controlled clinical trials and randomized pilot studies of different complementary therapies, including animal-assisted therapy, art therapy, and music therapy, were conducted. The complementary therapies discussed in this article showed positive outcomes for patients with hospital-induced anxiety and has no adverse effect reported. Hence, hospitals may consider introducing complementary therapies, such as those mentioned in this study, to improve the patients' experiences in the Emergency Department.

Keywords

Stress, anxie, animal-assisted therapy, art therapy, music therapy

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Introduction

Visiting the Emergency Department (ED) could be an extremely stressful event for many patients. (Rajendran et al., 2020; Reddekopp et al., 2020). They may feel frustrated, anxious, scared, or even in pain at the ED with overloaded patients. Studies suggested that up to 47% of ED admitted

patients developed severe psychological distress. A recent study claimed that symptoms of psychological distress remained in up to 38% of the patients 30 days post ED admission (Faessler et al., 2016; Forero et al., 2006; Marchesi et al., 2004). Stress and anxiety developed during ED admission are often undetected and undiagnosed (Pinto & Paul Musey, 2018). Therefore, they were untreated

in most cases. The condition could potentially affect the experience of the patient in the ED and the quality of life after the visit. Pharmacological therapy could be administered to the patients. However, adverse effects may be associated with the treatment. Less aggressive complementary treatment approaches are presented in this article. Controlled clinical trials and randomized pilot studies of different complementary therapies, including animal-assisted therapy, art therapy, and music therapy, were performed. These treatment approaches were proven effective in relieving stress and anxiety developed upon admission into the ED (Hartling et al., 2013; Kline et al., 2019; Rajendran et al., 2020; Weiland et al., 2011).

Animal-assisted therapy (AAT) refers to the treatment utilizing a trained animal, mostly therapy dogs, to relieve patients' conditions such as pain or mental health disorders (Marcus, 2013). AAT is used occasionally in psychiatric patients to relieve psychological stress and reduce anxiety levels (Barker & Dawson, 1998; Nahm et al., 2012). The mechanism of the treatment is believed to be bringing the stressed or anxious patient back into a calming state by reducing serum epinephrine and norepinephrine (Barker & Dawson, 1998; Nahm et al., 2012). Some studies have suggested that pet companionship can potentially reduce blood pressure and even reduce cardiovascular morbidity and mortality (Allen, 2003; Friedmann et al., 1980; Nahm et al., 2012). AAT should be contraindicated in patients who are allergic to animals or have zoophobia. Hygiene could be another potential issue, as introducing an animal into the hospitals or clinics poses the risk of spreading zoonotic diseases. The problem could be resolved by a strict vaccination program for therapy animals, and routine veterinary checks via laboratory tests.

Art and music therapy are practical therapeutic approaches, classified as creative therapy, with fewer limitations compared to AAT. Art therapy is a form of psychotherapy where visual art is used as a medium to assist patients to express their emotions. It is also utilized to treat psychological disorders and enhance mental health (Bitonte & De Santo, 2014; Stuckey & Nobel, 2010; Van Lith, 2016). Music therapy is another form of creative therapy, harmonizing sound, and melody, with a similar

approach and outcome. Despite studies on the treatments that have been previously proven to be effective in relieving symptoms of psychological distress, the extent of the therapeutic outcome is not well studied (Stuckey & Nobel, 2010). However, with fewer limitations and very few possible side effects, creative therapy, such as art and music therapy, composes a good candidate to support patients on top of allopathic treatments. This paper intends to provide an overview and update on current complementary treatment for psychological distress in the ED.

Design/Methodology/Approach

Literature and the most recent controlled clinical trials of the complementary therapies including AAT, art therapy, and music therapy in ED patients were gathered from the PubMed database and discussed in this paper. Our selection criteria include randomized controlled trials of the listed complementary treatments for psychological distress within the ED setting. A total of 5 clinical trials were included in this study, 1 for AAT, 1 for art therapy, and 3 for music therapy, the 5 clinical trials reached our selective criteria. The risks and benefits were listed out and the effectiveness will be discussed with any recorded side effects and limitations.

Results and Discussion

Animal-assisted therapy

The bonding between domestic animals and humans is believed to be therapeutic for patients who suffer from anxiety, pain, depression, or fatigue. (Therapy Dogs Bring Joy and Healing, n.d.) AAT was done by exposing the patient to a trained disciplined therapy animal, mostly but not limited to dogs. Although the therapy is accepted by some medical authorities and organizations, it is still important to perform randomized clinical trials to ensure that the therapy is effective and safe for patients. Unlike traditional pharmacotherapy, AAT is less likely to induce physiological adverse effects. However, patients who receive such treatment should not be afraid of the therapy animal nor allergic to them. (Kline et al., 2019) Major concerns of the therapy are sanitary problems or the interference of the staff work by the therapy animals. (Nahm et al., 2012; Therapy Dogs Bring Joy and Healing, n.d.)

A controlled clinical trial utilizing therapy dogs to reduce anxiety in ED patients was performed recently. 80 participants were included in the study. The care providers of the patients all agreed that the patient is experiencing moderate to great anxiety and patients who are fearful of dogs or allergic to dogs were excluded from the study. 40 patients were assigned into each group: the control group, and the therapy dog group. In the therapy dog group, patients were arranged to meet the therapy dog with their handler for 15 minutes, while patients were treated with standard care for 15 minutes in the control group. (Kline et al., 2019) The actual treatment of the standard care was not discussed in the literature. Two follow-ups were performed; the first follow-up was done 30 minutes after the treatment. Pain, depression, and anxiety score were recorded during the follow-up session and the last follow-up was done as late as possible during the patient's ED visit. (Kline et al., 2019) No medication was prescribed to the patients in both groups before the first follow-up. However, 1 patient in the therapy dog group and 7 patients in the control group received an opioid pain medication in the ED between the first and last follow-up. 2 patients from the therapy dog group and 4 patients were also administered with anxiolytic agents. (Kline et al., 2019) The median and mean initial scores of anxiety, pain, and depression were similar between the two groups. A significant

reduction of median anxiety and pain scores was observed in the therapy dog group in the first follow-up and were the same in the second follow-up. The median anxiety and pain scores remained unchanged throughout the two follow-ups in the control group. (Kline et al., 2019) Both the control and the therapy dog groups showed a reduction in the median depression score in the first follow-up and the median depression score remained the same during the second follow-up. Nevertheless, the reduction in the therapy dog group was more statistically significant. (Kline et al., 2019) Despite the absence of a detailed scientific explanation of the psychological or biological mechanism of anxiety, pain, and depression alleviation, the data of this clinical trial suggested that AAT is effective in terms of relieving anxiety, pain, and depression in ED patients who were initially considered as moderate or severe anxiety by the treating physician. (Beck, 2014; Kline et al., 2019) Recent studies also suggested that therapy dogs are more accepted by the community, especially for people who have domestic pets or have experience with them. (Reddekopp et al., 2020) Only a small number of patients and hospital staff are afraid or are concerned that therapy animals may pose a sanitary risk. (Kline et al., 2019; Nahm et al., 2012)

There are several major contraindications of AAT. Patients who have zoophobia, or who are allergic to animals, might not be as effectively benefited from the therapy. The symptoms might potentially exacerbate due to fear and/or allergic reaction. (Mani & Weese, 2016) Hygiene is also one of the major issues and limitations of AAT, as introducing live animals into the hospital settings possess a potential risk of spreading communicable zoonotic diseases. The problem could be solved by developing a mature system of protocols and rules for therapy animals, which may require strict vaccinations of the animal, routine veterinary checks, educating the handler about high-standard hygiene, and arranging specific therapy spaces isolated from the wards. (Therapy Dogs Bring Joy and Healing, n.d.; Writing Panel of Working Group et al., 2008) There were no reported major adverse effects in this study. Given the effectiveness and lack of adverse effects, AAT can potentially be a form of conventional therapy for anxiety disorders, pain, and depression shortly with further clinical trials and studies performed. Despite

researchers challenging the methodology of proving the effectiveness of AAT, the therapy should be performed along with usual treatments when the potential risk of any adverse effect is low. (Reddekopp et al., 2020)

Art therapy

Art therapy is considered a form of creative therapy. It is utilized to treat psychological disorders and to improve the patient's mental well-being. (Van Lith, 2016) A trained art therapist is often involved in the therapeutic process. (Bitonte & De Santo, 2014) Studies have revealed that art-making can potentially reduce the cortisol level in the human body, which may alleviate stress and/or anxiety. (Kaimal et al., 2016) Besides, art therapy has been used to treat several conditions including acute stress disorders or even post-traumatic stress disorder (PTSD). (Bitonte & De Santo, 2014) In clinical settings, adult coloring books are often offered in waiting rooms for relaxation purposes. Nevertheless, few studies were done to prove the effectiveness of the measure. (Nanda et al., 2012; Rajendran et al., 2020) Coloring is one of the commonly used techniques in art therapy and was shown to be constructive in a previous study. (Kim & Kang, 2013)

A recent clinical trial was completed to examine the effectiveness of using adult coloring books to relieve stress and anxiety in ED patients. (Rajendran et al., 2020) The clinical trial consisted of 53 participants, 26 of them were assigned to the therapeutic coloring group and the others, 27 participants, were assigned to the placebo group. Hospital Anxiety and Depression Scale (HADS-A), a commonly utilized self-reporting system for anxiety and depression, was used in this study to define the severity of the patient's mental situation. (Dennis et al., 2007; Rajendran et al., 2020; Zigmond & Snaith, 1983) Participants were recruited in the ED and all the included patients have a HADS-A ≥ 7 , indicating moderate to severe anxiety. (Brennan et al., 2010; Kuijpers et al., 2003; Rajendran et al., 2020; Romash, IR., Vynnyk MI., 2019) The therapeutic group received a coloring pack that consists of 10 mindfulness coloring book images with 36 color pencils. The placebo group was provided a placebo pack containing a pen with 10 blank papers for them to draw or write freely. (Rajendran et al., 2020) The HADS-A were assessed again 2 hours after the packs were provided in the follow-up and the data

were compared with the baseline HADS-A. The baseline mean of HADS-A score in the therapeutic group was slightly higher than that of the placebo group. Although the mean of HADS-A scores in both groups was decreased in the follow-up, the mean changes in the therapeutic coloring group are more significant with a decrease of 3.7 compared to the mean placebo group change of 0.3. The mean HADS-A score went from 13.1 to 9.3 in the therapeutic coloring group which supports that the coloring book, a tool utilized in art therapy, can alleviate anxiety and depression. However, the mean HADS-A score in both groups in the follow-up was > 7 , which marked the threshold of significant anxiety (Brennan et al., 2010; Kuijpers et al., 2003; Rajendran et al., 2020). This suggested that the patients in both groups were still in a state of moderate to severe anxiety after the 2 hours session. Additionally, the involvement of qualified art therapists was not mentioned in the study, assuming that the therapy session was not given by an art therapy professional. Further large-scale monitored studies with the involvement of relevant professionals should be implemented to further investigate the effectiveness of the therapeutic approach.

There were no reported side effects of the art therapy. Contraindications were not discussed in the study. However, the limitation may be due to the insufficient impact that coloring books may possess as a single therapy. Additionally, the coloring session is 2 hours, which might be time-consuming in comparison to other therapy options discussed in this article. The scale of anxiety and depression was inadequate to bring severely anxious patients back to a stable state, determined by the HADS-A score < 7 . Clinical trials on coloring in addition to other therapeutic approaches could be completed to maximize the effect of the technique.

Music therapy

Music therapy has been exercised in various clinical settings. This includes behavioral and cognitive disorders. (Gómez-Romero et al., 2017) oncology patients. (Bradt et al., 2016) and relieving anxiety in the ED. (Belland et al., 2017; Hartling et al., 2013; Mandel et al., 2019; Weiland et al., 2011) A randomized pilot study compared the effect of music therapy plus standard care and standard care alone, as a control group, in elderly patients (> 65 years old). The music

intervention involved handling tablets and headphones to the patients and allowed them to listen to music for one hour. The music was slow and had no lyrics. Patients with deafness had been excluded from the study. The study utilized Spielberger's state-trait anxiety inventory (STAI) survey to measure state anxiety. The STAI score of 80 indicates extremely high anxiety, whereas a score of 20 denotes little-to-no anxiety level. (State-Trait Anxiety Inventory Self Evaluation Questionnaire, Form Y | PTC, n.d.) With a total of 35 participants, there was a statistical significance in the mean STAI scores reduction of 10 ± 12.29 in the treatment group, and 1.88 ± 7.97 in the control group. (Belland et al., 2017)

Sound compositions developed at the Royal Melbourne Institute of Technology (RMIT) were incorporated into a randomized controlled trial at St. Vincent's Hospital, Melbourne (SVHM) to investigate the effect on patients' self-rated anxiety levels at the hospital's ED. (Weiland et al., 2011) Participants were ≥ 18 years old patients at the ED. The STAI was adopted as an outcome measurement. (State-Trait Anxiety Inventory Self Evaluation Questionnaire, Form Y | PTC, n.d.) Participants were randomly assigned to one of the five groups: headphone only, ED ambient noise without verbalization, electroacoustic composition, composed non-musical audio, and combination of binaural beats in audio field recordings. The STAI's were collected before listening, and 20 minutes after listening to the recordings. The participants' total trait anxiety scores were ranged in moderate anxiety level (score 39-45). The electroacoustic composition, non-musical audio field, and binaural beats combination groups demonstrated significantly lower anxiety levels post-intervention in comparison to the control group and the ED ambient noise group. The STAI score was reduced to between 33.7-36.9 in the three music intervention groups which indicated low anxiety levels. (Weiland et al., 2011)

Another randomized clinical trial was designed to assess the effect of music therapy on pain reduction and distress in 42 pediatric patients, aged 3-11 years, in the ED at the Stollery Children's Hospital. (Hartling et al., 2013) Children's self-reported pain and STAI completed by their parents were collected. (State-Trait Anxiety Inventory Self Evaluation Questionnaire, Form Y | PTC, n.d.)

The music, selected by a music therapist, was played via an iPod speaker during the intravenous (IV) placement. The result of music intervention was found to be borderline significant in reducing the children's increase in distress overall, but there was no statistically significant in behavioral distress between the music intervention and standard care (control) groups. (Elliott et al., 1987) However, the Faces Pain Scores, measured by Faces Pain Scale-Revised were found to be significantly different pre-procedure and post-procedure with a median of 0 in the music group, and 2 in the standard care group. (Hicks et al., 2001) This indicated a positive outcome and impact on children receiving IV placement. In addition, nurses who performed the IV placement were reportedly more relieved and satisfied during the procedure in the music group (86%) in comparison to the standard care group (48%) ($P = 0.02$). (Hartling et al., 2013)

The limitations of the music therapy studies could be due to the small sample size, and the variety of music selection. A collaboration with a music therapist may aid the music intervention procedure and standardize the choices of tunes as observed in the previous clinical trial. (Hartling et al., 2013) The underlying illnesses such as severity could play a role in the ineffectiveness and cooperativeness in participation. (Belland et al., 2017) Patients with hearing impairment could not participate in the studies. (Belland et al., 2017; Hartling et al., 2013; Weiland et al., 2011) In the studies collected, music therapy illustrated positive outcomes in lowering the anxiety levels in the ED, and may also play a role in easing and diverting the pain during painful procedures. (Hartling et al., 2013; Tan et al., 2010) Patients and healthcare staff also reported high satisfaction with music therapy during their ED stays. (Mandel et al., 2019) The mechanism of music therapy was proposed and could be harmonized in 4 levels: learned cognitive response, cognitive activation of neural circuits, stimulated neural coherence, and cellular-genetic responses. (Clements-Cortes & Bartel, 2018) However, more scientific studies and larger-scale controlled trials are needed to uncover the mechanism of positive effects in music therapy.

Conclusions

ED setting could be a stressful environment for patients. Anxiety and depression may

develop due to the ED's atmosphere, in addition to patients' concerns for their health conditions. (Faessler et al., 2016; Forero et al., 2006; Marchesi et al., 2004) The poor mental states of these patients are often neglected and overlooked by the treating physicians in the ED. (Pinto & Paul Musey, 2018) Therefore, they were often undiagnosed and untreated. Pharmacotherapy such as anxiolytics may be excessive for patients who suffer from ED-induced anxiety or stress. Three forms of complementary therapies were discussed in this article and randomized clinical trials of each therapeutic approach in ED patients have proven the effectiveness of the therapies. No major adverse effects were reported, indicating the safeness of these treatment options. Pharmacotherapy is the conventional treatment for anxiety and depression in the past decades. The effectiveness of anxiolytic medications was not doubted. However, the strong therapeutic effect arrives with significant adverse effects. Side effects including drowsiness, sedation, confusion, GI problems, or even sexual dysfunction after the use of anti-anxiety drugs were well-documented. (Anxiety Drugs (Anxiolytics) Side Effects, List of Names & Interactions, n.d.; Guy Edwards, 1981; Müller-Spahn, 1999) Due to the long list of potential adverse effects of the anxiolytic medication and the risk of patients developing dependence on medication, physicians often hesitate to prescribe anxiolytic drugs when patients with mild to moderate anxiety were seeking help. (Longo & Johnson, 2000) The complementary therapies discussed in this paper showed positive outcomes for patients with hospital-induced anxiety. Although the methodology of testing these complementary therapeutic approaches was criticized by researchers, the overall patients' clinical outcomes were positive. The limitations could be resolved with standardized protocols and more cooperation with the experts in each therapeutic field. The therapies were accepted by medical authorities and organizations. (Hartling et al., 2013; Kline et al., 2019; Rajendran et al., 2020; Reddekopp et al., 2020; Weiland et al., 2011) Hospitals may consider introducing complementary therapies, such as those mentioned in this study, to improve the patients' experiences in the ED.

Conflict of interest

The author declares that she has no conflict of interests.

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Experience in correcting eating disorders in the clinic of mental illness

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Abstract

Introduction: Eating disorders - a class of psychogenic behavioral syndromes associated with eating disorders. The class of these disorders includes anorexia nervosa, bulimia nervosa, compulsive overeating, as well as several other disorders, which are included in the international classification, to section F 50-F 59.

Purpose: The purpose of our study is to trace the dynamics of individual eating disorders in patients with various mental illnesses under the influence of corrective therapy.

Methodology: Were examined 77 patients with various mental diseases who have had eating disorders. The first (I) group included 33 patients. They have added Metoclopramide at a dose of 20 mg/day to the main treatment. The second group (II) - 44 patients who received the drug Ondansetron at a dose of 4 mg/day, respectively. The condition of all patients was assessed according to the following scales: Eating Attitudes Test (EAT-26), 36-Item Short-Form Health Status (SF-36). Body mass index (BMI) was calculated to study the dynamics of weight. All examinations of patients were performed at the beginning and after 14 days of treatment.

Results: According to the EAT-26 scale the average score in the I group was 29 ± 2.8 points, and in the II - 30.1 ± 2.4 , respectively. According to the SF-36 questionnaire, the average total score in the I group was - 69.5 ± 1.8 before treatment, 79.5 ± 1.6 - after treatment improved by 12.5% ($p < 0.05$). In group II - 70.8 ± 1.2 and 89.4 ± 1.5 , improving by 20.8%, respectively ($p < 0.05$). Under the influence of the therapy, the patients' manifestations of eating behavior decreased, which contributed to the growth of BMI: in group I - by 2.1 ± 1.3 kg, in group II - by 3.5 ± 2.3 kg, which is 1.6 times more.

Conclusions: The drug Ondansetron, intended for the correction of eating disorders, in combination with therapy of the underlying pathology, was likely to be more effective than Metoclopramide hydrochloride, which should be considered in practical psychiatry.

Keywords

Eating disorders, mental illness, Ondansetron, Metoclopramide

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Introduction

Eating disorders - a class of psychogenic behavioral syndromes associated with eating disorders. The class of these disorders includes anorexia nervosa, bulimia nervosa, compulsive overeating, as well as several other disorders, which are included in the international classification, to section F 50-F 59 (Illytska, T., 2018). The impact of eating disorders is significant in terms of both economic costs and reduced welfare (Streatfeild, 2021). Each of the disorders has its peculiarities of development and course, but they all significantly impair the quality of life. (Galmiche, M., Déchelotte, P., Lambert, G., & Tavolacci, M. P., 2019).

According to WHO experts, 70% of life expectancy and health depend on lifestyle, the most important factor of which is nutrition. The study of eating behavior as a psychological factor in the quality of human life is due to the needs of today because eating disorders are a very pressing issue. They are associated with severe medical and social consequences and have the highest mortality rate among all mental illnesses. According to the Eating Disorders Coalition (2016), today every 62 minutes at least one person dies from these disorders. The stigma around eating disorders reinforces misconceptions about their causes, inhibits efforts to promote knowledge to prevent, detect, and treat this type of disorder (Schaumberg, K. et.al, 2017). It is especially difficult to promote this knowledge among patients with mental disorders.

Therefore, the development of effective prevention programs is an urgent area of work. Therefore, this issue requires a comprehensive study of the peculiarities of the development of these disorders and the search for effective schemes for their correction.

Purpose:

To trace the dynamics of individual eating disorders in patients with various mental illnesses under the influence of corrective therapy.

Design/Methodology/Approach

The research was conducted based at the Municipal non-commercial enterprise "Precarpathian regional clinical center of mental health of Ivano - Frankivsk regional council» and «Pohonyansky psycho-neurological boarding house». 77 patients with eating disorders were examined against the background of various mental disorders, in which the syndrome of gastric dyspepsia was clinically dominant and was mainly manifested by nausea, vomiting, lack of appetite.

Depending on the prescribed treatment, patients were divided into two groups. The first (I) group included 33 patients who on the background of treatment of the underlying pathology, as an antiemetic received Metoclopramide (central dopamine antagonist) at a dose of 20 mg/day, in the second (II) - 44 patients who received the drug Ondansetron (highly selective 5HT₃ antagonist of serotonin receptors) at a dose of 4 mg/day, respectively.

The study was comprehensive. All patients underwent a general clinical and physical examination, a survey on the scale "Eating Attitudes Test", which consists of 26 questions (English Eating Attitudes Test; EAT-26) to establish eating behavior and scaling on a short form of the questionnaire Medical Outcomes Study 36-Item Short-Form Health Status (SF-36), to assess the quality of life. Body (BMI) mass index was calculated to study the dynamics of weight.

All examinations of patients were performed at the beginning and after 14 days of treatment. Statistical analysis of the results was performed using a package of statistical functions of the program "Microsoft Excel".

Results and discussion

Among the examined patients were: 15 with anorexia nervosa, 26 patients who did not eat due to withdrawal syndrome due to chronic alcohol poisoning, 15 patients who refused to eat due to schizophrenia with imperative hallucinations, 21 patients were diagnosed with acute enteral poisoning by alcohol surrogates.

In 38.0% of all subjects, there was a history of lack of compliance with previous therapy, which was manifested by a deficit of body weight. According to the methodology of the EAT-26 scale, a result with a score of ≥ 20 points should be considered an eating disorder. As a result of our study, eating

disorders were confirmed in both groups. The average score in the 1st group of patients was 29 ± 2.8 points, and in the second - 30.1 ± 2.4 , respectively.

According to the SF-36 questionnaire, the average total score in the first group was - 69.5 ± 1.8 before treatment, 79.5 ± 1.6 - after treatment improved by 12.5% ($p < 0.05$). In group II - 70.8 ± 1.2 and 89.4 ± 1.5 , improving by 20.8%, respectively ($p < 0.05$), which proves the higher effectiveness of Ondansetron compared with standard therapy with Metoclopramide hydrochloride. Under the influence of the therapy, the patients' manifestations of eating behavior decreased, which contributed to the growth of BMI: in group I - by 2.1 ± 1.3 kg, in group II - by 3.5 ± 2.3 kg, which is 1.6 times more.

Limitations of the study \ Strengths of the study:

The practical value of the results of our study can be used to address scientific and practical issues aimed at improving the correction of identified eating disorders in patients with various mental illnesses, which in turn directly affects the quality of life of such patients, their physical and social functioning.

Conclusions (and Future Work)

Thus, the drug Ondansetron, intended for the correction of eating disorders, in combination with the therapy of the underlying pathology, was likely to be more effective than Metoclopramide hydrochloride

Conflict of interest

The authors declare that they have no conflict of interest.

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