Designing a therapeutic model of personality biopsychological approach for personality difficulty: A new setting for psychiatric residents’ clinical education

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Abstract
Subclinical personality difficulties are the source of many interpersonal problems, and it is necessary for psychiatry residents to gain a comprehensive knowledge of the concepts of personality and personality disorders, including subclinical disorders. Clinical education is one of the most important aspects of medical students’ training. Improving the quality of this course is of particular importance. The services provided at the Personality Modulation Clinic of Razi Educational and Medical Center in Tabriz have been designed based on available scientific evidence and experiences for individuals with personality difficulties. The current research evaluates the effects of a new treatment known as the “Personality Biopsychological Approach” for individuals with personality difficulty for the first time given the absence of such an integrated and coherent program in clinical education. There are five main phases of study design: assessing patients’ needs, assessing psychiatric residents’ needs, formulating educational goals, the design of treatment model, and implementation. The current study found that society’s mental health is a top priority for national growth and development. Therefore, training psychiatrists in this field plays a crucial role in ensuring both individuals’ and society’s health and well-being. This study indicates that psychiatry residents’ acquaintance with this issue can increase their ability in the correct diagnosis and intervention in preventing the exacerbation of psychiatric disorders.

Introduction
Personality disorders are common chronic mental disorders usually associated with various social dysfunction and problematic interpersonal relationships. Recent developments in psychiatry have highlighted the need for a new approach in the treatment of personality disorders. Considering the limitations of the previous classification system, the revision group of the Personality Disorders Chapter in the 11th Edition of the International Classification of Diseases (ICD-11) has introduced significant changes in its approach to these disorders. First, the diagnostic classification approach has been changed to a dimensional approach. Second, the disease severity is determined by seriousness of the individual’s problems concerning probability of harm to self and others, interpersonal relationships and occupational, social, and educational functioning areas. Third, the diagnosis might be defined under five domains of trait qualifiers: “Negative Affectivity,” “Detachment,” “Dissociality,” “Disinhibition,” and “Anankastia.” Moreover, “personality difficulty” is considered as moderate psychological disorder in the 11th edition of the International Classification of Diseases.1

In fact, personality difficulty is not a psychological disorder and can be used for clinical beneficence in almost all healthy individuals and has been included in the Z-scoring system of the International Classification of Diseases for outpatient treatment. This classification describes people who have not been categorized under any mental disorders but have life and performance management problems that are not severe enough to cause significant disruptions in social, occupational, and interpersonal relationships.2,3

One approach that can be used to develop and improve mental health is “Cloninger’s Personality Biopsychological
Approach." This method introduced the psycho-biological model of personality as a coherent organization of the human body, mind, and soul. It considers personality as a complex adaptive system involving multidimensional interactions between temperament and character. Temperament traits are viewed as genetic traits and have certain biological elements. The character traits reflect both sociocultural and neurobiological mechanisms of semantic and self-aware learning.4

In recent years, due to changes in society's problems and subsequent changes in people's needs, psychiatrists have endeavored to create new plans for apparently healthy subjects without any major psychiatric issues. Indeed, psychiatrists should seek treatment of patients and those who do not show any major mental problems but have ongoing discomfort in their daily lives. This type of psychiatric treatment, known as “Cosmetic Psychiatry,"5 is gradually gaining in importance in the psychiatry field.6 Throughout this paper, the term "Cosmetic Psychiatry" is used to refer to improvement in cognitive, behavioral, and emotional aspects of people who do not suffer from a specific disease; in other words, the aim is to improve a person's mental state in the absence of a clinical disorder.7

Over the years, medical students' ability to acquire clinical reasoning, awareness of health promotion and disease prevention, and desire for personal development and better professional ethics have been the most significant aspects used in the design of medical education curricula in medical universities around the world, including the University of Dundee.2,8

Indeed, clinical education provides the opportunity for students to apply theoretical knowledge to the various practical skills needed in patient care.8 In other words, clinical education can be considered training that facilitates learning in a clinical environment where the clinical instructor and the student are equally involved. In clinical education, the goal is to create remarkable changes in students' abilities in clinical care so that they can use the learned skills at the culmination of their education.8

In this paper, the presentation of a new treatment model in clinical education and methods for improving psychiatric residents' professional performance to help lead to a brighter future for this field of science and enhancement in the quality of the services provided in this country's health system.

It should also be mentioned that, due to the membership of the author of the current article in the "Working Group for Revising, the Personality Disorders chapter" of the World Health Organization since 2017, and also with the approval of the Psychiatry Department of the Tabriz University of Medical Sciences, as an educational project, “Personality Modulation Clinic,” has been launched.

**Materials and Methods**

Developing a training plan that includes assessing patients' needs, assessing residents' needs, formulating educational goals, and designing and implementing a treatment model can help assure a successful training program. The training course can be viewed as a process consisting of five main phases:

**Phase 1: Conducting an assessment of patient needs**

The rate of people being diagnosed with personality difficulties is increasing in psychiatric outpatient clinics each year. The necessity of designing a treatment model using Cloninger's Personality Biopsychological Approach to promote the personal and social development of people with personality difficulty is apparent in the current situation. Since personality problems can lead to other psychiatric disorders, patient needs are assessed.

**Phase 2: Conducting an assessment of resident needs**

Depending on the necessities and educational needs obtained from the first phase of this study, the residents' educational needs are then evaluated. Skills, educational goals, and educational content based on residents' educational needs are designed and provided. For this purpose, a questionnaire was designed related to learners with 13 items, and target parts of the project were included. A Likert-type scale was used with very low, low, moderate, high, and very high as scale points. A panel of experts assessed the validity of the questionnaire. The questionnaire was then given to five psychiatry professors and two medical education specialists and was revised based on their feedback. To collect data and evaluate the process, the resulting questionnaire was given to 19 assistants participating in the process, and SPSS 20 was used to conduct the data analysis.

The results of the following diagram are related to the needs assessment of psychiatric residents for the implementation of the training course. As this diagram shows, 54% rated the need for psychiatric residents to complete this training course as "very high." (Figure 1)

**Phase 3: Development of educational goals**

- Strengthening psychiatric residents on subjects related to personality difficulties
- Strengthening practicing psychiatrists on subjects related to personality difficulties
- Educational course design
- Suggestions for modifying and revising the psychiatric curriculum (inclusion of educational content related to personality difficulty).

**Phase 4: Design of a treatment model**

The following steps were used to design the treatment model:

- Searching the references and determining the topics for education
- Developing a training program for the diagnosis of personality difficulties using "Cloninger's Personality Biopsychological Approach."
Securing approval of the training program in the “Working Group on Development of Knowledge of Psychiatry and Psychology in accordance with the country’s culture”

Informing the residents about the time and subject of the training course

Gaining approval for holding visits at the Personality Modulation Clinic (at the Razi Educational and Medical Center in Tabriz) in the presence of residents and their supervisors once a week.

Phase 5: Implementation

In this phase, a semi-structured interview was conducted based on the diagnostic criteria in the 11th Edition of the International Classification of Diseases. The 125-item Temperament and Character Inventory (TCI) was administered to assess four temperament traits (Harm Avoidance, Novelty Seeking, Reward Dependence, and Persistence) and three character traits (Self-directedness, Cooperative, and Self-transcendence). After completing all interviews, participants underwent the treatment at the Personality Modulation Clinic at the Razi Educational and Medical Center in Tabriz, Iran.

In subjects with temperament issues, biological methods, including psycho-pharmacotherapy, biofeedback (for modifying problems related to the autonomic nervous system), and neuro-feedback (for modifying cognitive problems) were applied. Psycho-pharmacotherapy was based on Lövheim's cube theory and evaluates the relationship between temperament traits and neurotransmitter systems. There are two primary aims for using medication: (1) To calm the person and maintain her/his arousal at the optimal level, where, by inducing calmness and relieving harmful emotional thoughts, the person feels ready to resolve conflicts; and (2) To regulate temperament by modulating temperament elements.

However, people whose arousal was beyond the optimal level were referred to the Razi Educational and Medical Center or to private clinics (upon patient request) for neurofeedback and/or biofeedback therapy. Biofeedback is used to normalize peripheral arousal disorders, and neurofeedback is used to normalize central arousal disorders. The number of the neuroscience intervention sessions was limited, and a neuroscientist performed the protocol for the biofeedback and neurofeedback interventions provided by the psychiatrist.

In terms of character problems, short-term eclectic psychotherapy was used, as this component of personality has a conceptual nature. For instance, in issues such as low sense of responsibility, looking over the person’s past and oedipal period concerns, along with education methods for increasing the person’s understanding of the consequences of the behavior, were used. In this regard, Cloninger Planes of Being has been shown to be very useful (Table 1).

Patient’s satisfaction and function improvement were considered as the end of the treatment criterion. In addition, promotion in character scale and modulation of temperament traits were reviewed and documented.

Discussion

Quality improvement of services in health, treatment, and medical education is widely accepted among practitioners. Meanwhile, it is the most crucial responsibility of universities to train talented humans who can promote community health and treatment requirements with high quality. Furthermore, clinical training is one of the most

Table 1. Emotional aspects of the 25 subplanes of being as described by specific modules of temperament for nonspiritual planes and modules of character development for the spiritual plane

<table>
<thead>
<tr>
<th>Subplane</th>
<th>Sexual plane</th>
<th>Martial plane</th>
<th>Emotional plane</th>
<th>Intellectual plane</th>
<th>Spiritual plane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual subplane</td>
<td>Shy vs. beguiling (HA3)</td>
<td>Exploratory vs. unexcitable</td>
<td>Attached vs. detached (RD3)</td>
<td>Perfectionistic vs. pragmatic (PS4)</td>
<td>Peaceful</td>
</tr>
<tr>
<td>Intellectual subplane</td>
<td>Pessimistic vs. optimistic (HA1)</td>
<td>Impulsive vs. rigid (NS2)</td>
<td>Sentimental vs. indifferent (RD1)</td>
<td>Determined vs. ambivalent (PS2)</td>
<td>Patient</td>
</tr>
<tr>
<td>Emotional subplane</td>
<td>Inhibited vs. uninhibited (HA total)</td>
<td>Irritable vs. stoic (NS total)</td>
<td>Sociable vs. distant (RD total)</td>
<td>Persistent vs. impersistent (PS total)</td>
<td>Charitable</td>
</tr>
<tr>
<td>Martial subplane</td>
<td>Fearful vs. risk-taking (HA2)</td>
<td>Extravagant vs. frugal (NS3)</td>
<td>Warm vs. aloof (RD2)</td>
<td>Eager efforts vs. lazy (PS1)</td>
<td>Respectful</td>
</tr>
<tr>
<td>Sexual subplane</td>
<td>Fatigable vs. vigorous (HA4)</td>
<td>Disorderly vs. regimented (NS4)</td>
<td>Dependent vs. independent (RD4)</td>
<td>Ambitious vs. underachieving (PS3)</td>
<td>Hopeful</td>
</tr>
</tbody>
</table>

Note: HA, Harm Avoidance; NS, Novelty Seeking; RD, Reward Dependence; PS, Persistence.
Source: Adapted from Cloninger.4
essential steps in medical education, and enhancement of the quality of clinical training courses should be taken into account. On the other hand, the psychological health of the society is a top priority for national growth and development. In this respect, psychiatrists play a key role in ensuring individual and societal health and well-being in all age groups. Therefore, comprehensive programs that are cost-effective and culturally acceptable should be prepared for psychiatry residents to augment their performance for mental health promotion, treatment, and rehabilitation.

Conclusion
To the best of our knowledge, no comprehensive educational program encompassing psychiatric personality difficulties has been designed and organized in Iran. Early and accurate diagnosis of personality difficulty problems is an effective way to prevent behavioral and emotional disorders and the development of serious psychiatric disorders. Psychiatry residents’ acquaintance with this issue can increase their ability to perform correct diagnosis and improved intervention to prevent the exacerbation of psychiatric disorders. The Personality Modulation Clinic of the Razi Educational and Medical Center in Tabriz is a new setting for training psychiatry residents in achieving the above-mentioned purposes.

Ethical approval
Not required.

Competing interests
None to be declared.

Authors’ contributions
The manuscript was written by AF and BD, and the final confirmation of this article was performed by AF.

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References