

Overview on Type D Personality

Pranati R. Chavan

Assistant Professor (Pharm D), Shivlingeshwar College of Pharmacy, Almala, Latur-413520, India

Abstract: Type D personality is a trait comprising of negative affectivity and social inhibition. Social inhibition and negative affectivity makes individuals to self withdrawal and lack of assertiveness, and poor health compliance leading to comorbidities and psychosocial errors. Type D works by increasing stressful condition and affecting biological markers of body. The study focuses on the exact summarization of this personality for obtaining the objectives. It can be assessed by various scales available and can be overcome by different strategies. **Objectives:** To aware people about particular kind of personality and their affect. To improve the quality of life of the patients and To reduce the comorbid state by retarding further complications. **Discussion:** Type d personality is having many clinical complications associated with it and it can cause all system related disease states. Development of such trait will result to poor health status, poor compliance, impaired cognition and improper medication adherence. **Conclusion:** This article depicts the overview on type D personality and suggests the need to perform research to generate epidemiological data and developing further strategies to overcome complications of type D personality. There is again a necessity to aware people about this kind.

Keywords: Type D Personality, negative affectivity, social inhibition, Health, Psychology

1. Background

Personality is a aspect that consider The combination of characteristics or qualities that form an individual's distinctive character. There are different kinds of personalities but out of which we are considering four main personality traits as

Type A- Self Driven, Competitive, Practical, Impatient and Aggressive

Type B- Charismatic, Easy Going, Patient, Too Casual, Procrastinator

Type C- Introvert, Stress Prone, Lone Workers, Stickers for Details, Perfectionist

Type D- Distressed, Negative, Pessimistic, Depressed And Socially Inhibited.

Among above four traits of personality this article is focused on the fourth type that is type D personality giving a different perspective of negative minded peoples.

2. Introduction

Type D personality is a global trait including two aspects as Negative affectivity and Social inhibition. Negative affectivity (NA) is consisting of negative emotions with time and duration. High-NA individuals experience more feelings of dysphoria, anxiety, and irritability; have a negative view of self; and scan the world for signs of impending trouble.

Social inhibition (SI) refers to the tendency to inhibit the expression of emotions/behaviors in social interactions to avoid disapproval by others. High-SI individuals tend to feel inhibited, tense, and insecure when with others.

Individuals who are high in both NA and SI have a distressed or Type D personality, given their vulnerability to chronic distress. Type D patients are at increased risk for a wide range of adverse health outcomes, including mortality and morbidity, even after invasive treatment with advanced methodologies. They are also at risk for posttraumatic stress and vital exhaustion. Physiological hyper reactivity, immune activation, and inadequate response to treatment are mechanisms that may explain this detrimental effect of Type D.

Type D has been linked to certain negative behaviors such as an unhealthy lifestyle, addictions, reluctance to consult or follow medical advice, and poor treatment outcomes, adversely affecting the clinical course of medical conditions and treatment compliance. Co-morbid conditions and addicts victims are at high risk for type d personality and are linked to have poor prognosis and health compliances.

3. Objectives

The main objectives of the study is to aware people about particular kind of personality and their affect, to improve Quality Of Life of diseased population with reference to their physical, psychological, social, and environmental health dimensions, and to assess the effect of age, sex, income, height, weight, and level of education, duration of disease, co morbidity and treatment duration on QOL on diseased patients.

4. Methods Assessment of Type D

Assessment of Type D can be done from various questionnaires available for psychosomatic assessment.

Type of Scale	Importance
Type D Scale-14 (DS14)	One the major and important scale is Type D Scale-14 (DS14) which was specifically developed to assess NA, SI, and Type D in a reliable and standardized way that poses little burden to respondents. Items of the DS14 were derived from its predecessor, the DS16, but also included new items that were developed to enhance the assessment of NA and SI.
The five-factor model of personality	It is a hierarchical organization of personality traits in terms of five basic dimensions: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience.
Global mood scale and health complaint scale	For Assessment of mood and health status
Cronbachs alpha test	A statistical test used to assess the reliability and internal consistency of DS14 scale whereas

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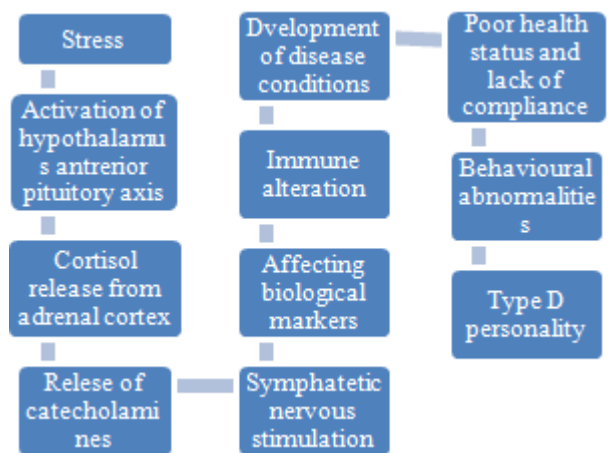
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	Pearsons correlation and factor analysis for assessing validity of DS14 against NEO five factor inventory
Different statistical tests	Used for finding Type D trait that includes logistic regression analysis, test retest correlation, fisher 2 test, repeated measures multivariate analysis of variance (MANOVA) with measures and time, internal validity, construct validity, temporal stability etc
DOCCO questionnaire	200 questions on stress, personality and lifestyle
State anxiety scale	The STAI measures two types of anxiety – state anxiety, or anxiety about an event, and trait anxiety, or anxiety level as a personal characteristic
Trait anger scale	A 57-item inventory which measures the intensity of anger as an emotional state (State Anger) and the disposition to experience angry feelings as a personality trait
Millon behavioral health inventory	150-item self-report measure in a true-false format, designed to examine coping styles and personality features among persons with physical illnesses
Beck depression inventory	21-item, self-rated scale that evaluates key symptoms of depression including mood, pessimism, sense of failure, self-dissatisfaction, guilt, punishment, self-dislike, self-accusation, suicidal ideas, crying, irritability, social withdrawal, indecisiveness, body image change, work difficulty, insomnia, fatigability, loss of appetite, weight loss, somatic preoccupation, and loss of libido
Tellengens multidimensional personality questionnaire	The questionnaire gives ratings on four broad traits, Positive Emotional Temperament, Negative Emotional Temperament, Constraint and Absorption, as well as 11 primary trait dimensions.
Somatic anxiety questionnaire	A 14-item self-report inventory that is divided into two 7-item scales (Cognitive and Somatic) that appear to reflect cognitive or somatic anxiety.
Southern Methodist university health questionnaire	To assess a broader range of health problems, Its 63 items include symptoms and complaints (e.g., abdominal or stomach pain, sore throat), minor illnesses (e.g., cold or flu, appendicitis), and more serious and chronic health problems (e.g., diabetes, hypertension, cancer).
Pennebaker inventory of limbic languidness	This 54-question self-test measures people’s tendency to notice and report a broad array of physical symptoms and sensations. Those with high symptom reports tend to be more nervous, distressed, and unhappy.
Hopkins symptom checklist	The HSCL is comprised of 58 items which are representative of the symptom configurations commonly observed among outpatients. It is scored on five underlying symptom dimensions—somatization, obsessive-compulsive, interpersonal sensitivity, anxiety and depression—which have been identified in repeated factor analyses.
Positive emotionality scale	The Positive Emotional Experiences Scale was developed by rephrasing the Kiefer and Barclay's (2012) Toxic Emotional Experiences Scale into positive emotional statements. The aim was that it would represent three factors: psychological recurrent positive state, social connectedness and physical refreshed energy.
Florida shock anxiety scale	The Florida Shock Anxiety Scale (FSAS) was developed to measure ICD patient shock-

	related anxiety.
Hospital anxiety and depression scale	It is suggested that the introduction of the scales into general hospital practice would facilitate the large task of detection and management of emotional disorder in patients under investigation and treatment in medical and surgical departments.
Patient health questionnaire	The PHQ-9 is a multipurpose instrument for screening, diagnosing, monitoring and measuring the severity of depression
Minnesota Multiphasic personality inventory	The Minnesota Multiphasic Personality Inventory (MMPI) is a psychological test that assesses personality traits and psychopathology. It is primarily intended to test people who are suspected of having mental health or other clinical issues.
Zukerman personality mode	Alternative Five Factor Model (Zuckerman & Kuhlman, 1993) explains Personality structure in terms of five factors, namely, Neuroticism-Anxiety, Activity, Aggression-Hostility, Impulsive-Sensation Seeking, and Sociability

5. Reasons of Type D

There are several reasons which can lead to cause Type D Personality among which include stress, physiological over activity, post traumatic stress, age, immune inactivation, inadequate response to cardiac treatment, vital exhaustion, increased risk of disease conditions like cardiovascular heart disease, asthma, diabetes mellitus, stroke, poor compliance, pregnancy associated emotional stress, work stress, lack of assertiveness, self withdrawal, less talk, undiagnosed maternal depression etc.



Stress and personality relation chart

Type D response can be formed due to abnormalities in parameters like Extraversion, neuroticism, emotional stability, conscientiousness, openness/intellect, agreeableness. Extraversion is considered as individuals preferences for social selfing. Reduction in extraversion generates aversive social interaction and decreases threshold for activation of ascending RAS that forms diffuse ANS arousal. Agreeableness is an interpersonal attitudes and behavior. Stress reduces natural killer cells. Reduction in natural killer cells decreases cytotoxic response and down regulates receptor function, decrease receptor density and affinity and thus immune alteration occurs.

As stress rises hypothalamus and pituitary response causes increased release of cortisol, higher amount of cortisol lead to affect alteration of immune response leading to rising cholesterol and triglyceride levels. This will lead to cause obesity and further cardiovascular conditions along with co morbidities like diabetes, stroke, post traumatic stress disorders and many more. It increase polypharmacy and shows poor health and medication compliance and reduced medication adherence. Thus it develops psychosomatic behaviors in the patient showing social inhibition and negative affectivity among people.

Work load among employees also one major concern to form psychosomatic abnormalities. It increases the absenteeism, rate of sick leaves, stressfulness, and symptoms of vital exhaustion, increased levels of burnout and low sense of personal accomplishment.

As age raises parameters like health status, mental status, co morbidity rate, polypharmacy, medication adherence, patient compliance all gets affected. Again the organ activity, body composition gets reduced as well as neurohormonal transmission also gets impaired. Due to psychological disturbances and stress the release of cortisol gets increased resulting in negative impact on psychological state of the person.

Some other parameters like pregnancy, lack of assertiveness, maternal depression will also affect the psychological status of child as well as mother leading to self withdrawal and less talk and shows social inhibition with negative thoughts.

6. Complication of Type D

- **Cardiovascular diseases:** hypertension, myocardial infarction, coronary artery disease, ischemic heart disease, congestive heart failure
- **CNS abnormalities:** Stroke, brain injury, Sleep disorders, increased vertigo, emotional and functional response
- **Respiratory system:** Worsening of asthma, copd, precipitation of respiratory infections
- **Metabolic disorders:** diabetes mellitus, thyroid diseases
- **Gastrointestinal diseases:** gastritis, inflammatory bowel disease, peptic ulcers, GI disturbances
- **Genital conditions:** Increased prevalence of vulvovaginal candidiasis
- **Psychiatric illnesses:** Depression, obsessive compulsive disorder, post traumatic stress disorder etc.

7. Strategies to Overcome Type D Personality

- **Psychotherapy** – It includes counseling aids to improve the psychological health of the patient
- **Lifestyle changes** – To improve quality of life lifestyle modifications are necessary.
- **Diet modification-** Diet including green leafy vegetables and specially including garlic, ginger, onion, tomato, apple, dry fruits for improving psychological status of patients.
- **Socialization** – Creating awareness and minimizing self withdrawal socialization is important

- **Exercise-** Exercise cause maintained levels of cortisol and reduces inflammatory responses as well as reduces disease developing mechanisms and thus various exercise recommendations may prove beneficial to minimize complications type d.
- **Meditation** – It is helpful to stabilize the cognitive functions and to improve functions of body.
- **Music therapy** – It may prove beneficial by imparting stress relief mechanism in patients
- **Medications** – By using suitable drug therapies also we can reduce the ill effects and symptoms type d in patients.

8. Discussion

Type D personality is not only affecting cardiac system but it also affects all systems of body of the human being and show many clinical complications. Type d personality is at a risk of wide adverse health outcomes, even after performing some surgical interventions patient does not show improvement. It is consisting of Negative affectivity and Social inhibition and thus creates negative impact on mental health producing symptoms of depression, anxiety, post traumatic stress disorder, mental distress, passive coping, less social support and physical health status. Type d individuals can present characteristics like agreeableness, extraversion and neuroticism, along with increased noncompliance and poor health outcomes, unhealthy lifestyle, reluctance to consult or follow medical advice. The personality can result in worsening of health complications like coronary heart disease, asthma, diabetes mellitus, stroke, myocardial infarction, left ventricular ejection failure, traumatic brain injury, increased prevalence of vulvovaginal candidiasis, vertigo, emotional and functional domain affect, sleep apnea, benign neoplasm, schizophrenia, hypertension, etc.

9. Conclusion

Type D personality has negative impact on lifestyle increasing rates of medically documented comorbidity, low subjective health rating, poor physician assessed physical functioning poor interview rated psychological functioning than non type d. Some factors like Agreeableness showing interpersonal attitudes and behavior will also affect personality traits. Stress causes transmitter release like epinephrine, nor epinephrine leads to mobilization of natural killer cells in circulation and upregulation of function, thus decreased natural killer cell causes reduction of cytotoxicity showing downregulation of receptor function, decreasing receptor density and affinity. Extraversion is a individual preferences for social selfing. Reduction of extraversion causes aversive social interaction minimizing threshold for activation of ascending reticular activating system which diffuses ANS arousal.

10. Conflicts of Interest

The author confirms that this article content has no conflict of interest.

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Author Profile



Dr. Pranati R. Chavan with Pharm D as a Qualification, completed Pharm D from Government college of Pharmacy, Aurangabad and currently working as a Assistant Professor in Shivlingeshwar College of pharmacy, Almala, Latur.