

Type D Personality in infarcted patients
a study with the Rorschach projective technique

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Abstract: The Type D personality is a vulnerability factor associated with the psychological suffering that affects the physical and mental health state. Literature shows that the Type D personality is defined by a combination of two independent constructs: the negative affectivity (NA) which refers to the tendency to experience negative emotions over time and in several situations; and the social inhibition (SI) or the tendency to inhibit emotions and behaviors in social interactions.

The present study aims to explore the emotions of a group of patients with heart disease, through the use of the Rorschach projective technique.

Method: Forty subjects with an history of heart attack, aged between 32 and 76 years, were evaluated in order to find some possible indicators of Type D personality such as the quality of contents, movements response, popular responses and Erlebnistypus.

Findings shows that the majority of patients present a prevalence of responses belonging to Animal and Anatomy contents and the Erlebnistypus is mostly introversive.

The study points out some scientific element useful both in research and in clinical practice, confirming the Rorschach potential in the assessment and identification of specific personality traits, involved in the Type D personality, that characterizes the majority of cardiac impaired patients.

Keywords: Type D Personality, Rorschach, Cardiac patients.

Introduction

The Type D personality is the result of several factors of vulnerability which leads to an experience of psychological distress that influences the individual physical and mental health state (Bartels et al., 2010). The Type D personality construct, where D stands for "Distressed", was operationalized through a self-report questionnaire consisting in a short and simple administration of 14 items for the measurement of Type D (DS14). The tool is used as a screening in the evaluation of the cardiac patient as a predictor of future traumatic cardiac events. The 14 items are grouped into two dimensions: (1) *Negative affectivity* (NA), which refers to the tendency to experience over time and in different situations predominantly negative emotions; (2) the *Social Inhibition* (SI) or the tendency to inhibit emotions and behaviors in social interactions. The Type D personality is defined by the combination of high scores in both dimensions (Denollet, 2005). The validation process of the original scale DS14 (Perdesen & Denollet, 2003) included an assessment of the validity of the construct, through the exploratory factor analysis, which confirmed the structure of two independent factors that had been assumed previously. In addition, the construct of the type D was compared with other personality dimensions to verify concurrent validity. In particular, the two factors that compose the subscales were compared with the Eysenck dimensions of *neuroticism* and *extroversion* (Eysenck, 1990) and with depression and anxiety. Denollet's study (2000) showed that *Negative affectivity* is associated, but not overlapped, with *neuroticism*, *anxiety* and *depression*. On the contrary, the *Social Inhibition* showed negative correlations to *extroversion* and has resulted independent from NA, *neuroticism*, *anxiety* and *depression*. The significance of this result is that the Type D has some emotional aspects related to *neuroticism* and other dimensions of psychological distress, characterized by the presence of a specific coping style of interpersonal relations centered social inhibition.

Several multicultural studies addressed the usefulness of the construct of "Distressed" personality in cardiology and recognized the good qualities of psychometric scale constructed to measure it. The most recent validation studies conducted in Denmark, Germany and Hungary (Pedersen & Denollet, 2003; Denollet, 2005), both in cardiac patients, both in large samples of the general population, have been replicated by the author of the construct of the diseases in Belgium and the Netherlands, obtaining the same results. The psychometric studies seem, therefore, confirm the overall reliability, in terms of validity and reliability of the DS14 as a tool for measuring the construct of type D personality and encourage their use in other countries. People with Type D personality, in fact, tend to hide their emotions, because of the fear of rejection and social disapproval and consequently perceive reduced levels of social support, which in turn increases recursively relational closing (Bartelès et al., 2010). Denollet shows that negative emotions experience leads to a chronic psychological distress and an impact on physical health.

It should be emphasized that the type D personality is not a pathological condition in itself, but it becomes pathological when the personality is undergone to the above-mentioned "alteration", or to the psychological distress and an intensive exposition towards negative emotions and the modifications in the structure can remain relatively stable for a certain period of time.

Denollet et al., (1995) have shown the deleterious effects of the configuration of the Type D personological health in patients with coronary artery disease by identifying the type D personality as an independent predictor of cardiac events. Wider sample sizes and follow-up studies showed, in a longitudinal study (Denollet et al, 1996), a higher mortality in patients with Type D compared to non D. Other studies show that the Type D personality is an important predictor of reduced quality of life and long-term mortality in patients with coronary heart disease, independently by biomedical risk factors, and cardiac events in patients with poor prognosis after an heart attack (Denollet & Brutsaert, 1998; Denollet et al., 2000; Denollet, 2002).

In most cases, patients with heart disease are in fact a type D personality (Grand et al, 2012), often accompanied by a considerable emotional distress in terms of anger, anxiety, fear, stress and irritability (Pedersen et al 2010).

Type D personality emerges as one of these psychosocial risk factors. Numerous empirical studies show, in fact, its association with mortality

from cardiac events and other important indicators of cardiovascular health, as evidenced in Denollet & Pedersen (2003).

This study aims to explore the emotions of patients with heart disease through the use of the Rorschach projective method, in order to identify any possible indicators characterizing the type D personality, in terms of negative affectivity and social inhibition.

Method

Forty subjects with an history of heart attack, of whom 32% female, aged between 32 and 76 years ($M\ age = 64 \pm 8.86$), participated in the study. The evaluation has been carried on with the auxilium of the Rorschach projective technique (Passi Tognazzo, 1994), with particular attention to potential indicators of the constructs characterizing the type D, such as Negative affectivity and social inhibition (content, movement responses, popular responses, Erlebnistypus).

Instrument

The Rorschach technique (Rorschach, 1942) is a psychological test, consisting in ten inkblot tables exploring the subjective organization of the content and form of the ambiguous stimuli presented. Responses are recorded, analyzed and interpreted to examine personality characteristics and emotional functioning. Each Rorschach's table has a main theme, with an important interpretative value supported by the psychoanalytic theory. The first card offers the opportunity to evaluate the mental flexibility of the subject to a new stimulus. The second card, in color, refers to the aggressive impulses or its suppression. The third card can be considered the image of identification and self-representation with respect to the other. The fourth card is connected with the father's image, it generate anxious and frightful feelings. The fifth card is the table of reality, a popular response may lead to the somatopsychic integrity of the self-representation. The sixth card is the table of sexuality (top / male sexuality, bottom / female sexuality). The seventh table is the main maternal image, the great central depression can evoke the uterus. The eighth card, is the first multi-colored, these stimuli are linked to the social-affective ability to adapt to the context.

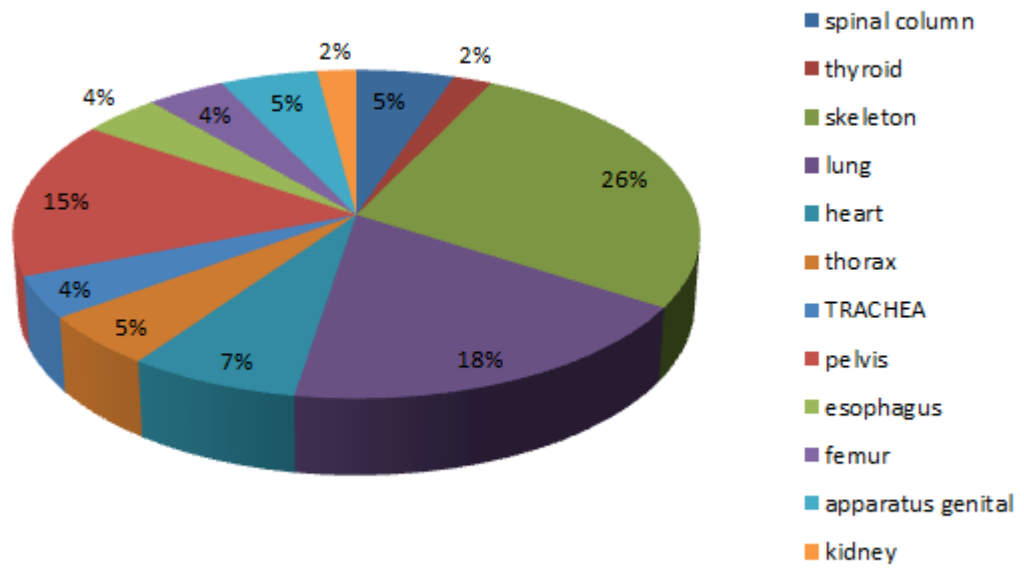
The ninth card has a vague form and it recalls the experience of loneliness, inspiring regressive and deep contents. The tenth card represents the

family, it differs from previous polychrome cards because of its dispersivity and variety of shapes and colors, which could be experienced by the subject as fragmentation / spaltung. It follows an *Inquiry Phase* the examiner clarifies the factors that led each answer, in order to correctly code responses into five categories: (1) *Location*: the section or area of the inkblot being used, with four possible symbols ranging from the whole inkblot to an unusual detail; (2) *Determinants*: the features, style, characteristics, or aspect of the inkblot that the examinee responded to (form, movement, color, shading); (3) *Contents*: the name or class of object(s) used in the response, from whole human to x-ray.; (4) *Popular Responses*: the coding goal is to determine whether the examinee's response is the conventional or unconventional given response for each card; (5) *Special Scores*: the presence of an unusual characteristic(s) in the response, from deviant verbalizations to color projection.

Results

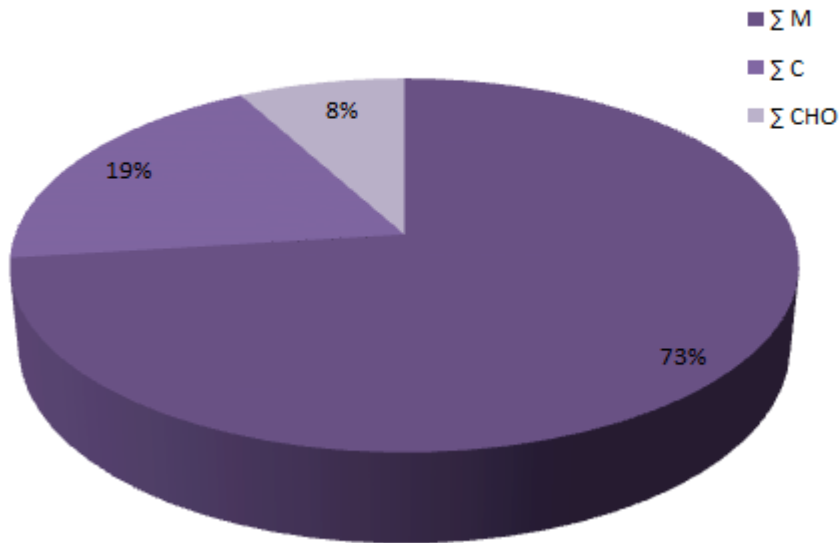
Data analysis revealed a prevalence of Animal content (63%) followed by Human (14%) and Anatomical (13%) contents. Despite of this heterogeneity, however, the prevailing images are skeleton (26%), lung (18%), pelvis (15%) (Graphic 1). The analysis of determinants, i.e. movement, color and shading responses revealed a prevalence of movement responses in particular, Human Movement Response (M=63%), Animal Movement Response (FM=35%), Inanimated Movement Response (m=1%) (Graphic 2). The Erlebnistypus resulted mostly introversive. Furthermore it can be observed a high presence of popular responses (42%), in particular in tables I, III, V, VIII, X.

anatomical contain
record (N=40)



Graphic 1

Σ responses movement color and shading



Graphic 2

Discussions

The clinical approach arises issues such as the possibility of modifying aspects of distress and the need of psychological intervention. Denollet (2000) considers two levels this characterization 1) intrapsychic level; 2) interpersonal level. At the first level, the Type D tends to experience difficulties in the emotional well-being. From the cognitive point of view, the Type D is prone to worry and to a negative view of reality. From an emotional point of view, symptoms of depressed mood are often accompanied by other negative emotions like anxiety and anger. Often the type D live under pressure and may feel unable to cope effectively with stressful events.

At the interpersonal level, the Type D tends to experience difficulties in social interaction. Individuals with high social inhibition perceive the social world as a threat, in the sense that anticipate negative reactions from others, such as social disapproval. To prevent these reactions, the type D adopts strategies such as enhancing self-inhibition and self-expression.

These strategies conduct to inhibit the expression of thoughts and feelings, feelings of discomfort with strangers and difficulties in assertive behavior. Individuals with a Type D personality have a limited capacity to deal adequately with stressful life events and for this reason psychological interventions could be helpful and supportive. The support is focused on the empowerment of their coping skills in order to decrease the acute and chronic stress experienced, and thus to reduce their work-related problems and increase their mental health status.

The protocols analysis focused on the indicators of *negative affection* and *social inhibition* allows the following considerations: 1) the sample was homogeneous in providing a high response rate of anatomical contents, inducing the interpretive hypothesis of *excessive somatic concerns*, compatible with worry physical health-related; 2) the affectivity is characterized by a negative value and color responses are severely reduced, compared to the movement responses and, in particular, animal movement that point out not only an introversive experience, but also elements of inhibition and the tendency to provide popular answers. This attitude confirms the desire of acceptance and compliance, although there is no evidence of psychological distress.

Conclusions

As clinicians, we aimed to verify if the exploration of the projective process could be, in this case, a key method to understand the patient's mental functioning, since it is characterized by an ambiguous nature, wich leads to effectively explore the inner world and so processes otherwise unsearchable (Settinieri & Mento, 2011; Mento et al., 2014; Mento et al., 2015; Settinieri et al., 2015).

In conclusion, the study provides some results useful both in research and in clinical practice, underlying the Rorschach's potential in the assessment and identification of specific personality traits involved in the Type D personality, that characterizes the majority of cardiac patients, being a deep indicator of the psychic functioning.

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