

University of Medicine, Pharmacy, Science and Technology Tîrgu Mureş Doctoral School

PhD Thesis Summary

The role of psychological mediators and the impact of cognitive-behavioral interventions in patients with thyroid disease and diabetes

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Summary

Introduction

For a long time, traditional medicine worked according to the clinical model: the cause determines the effect, which actually determines the disease. In recent decades, attempts have been made to replace this model with the bio-psycho-social one. This bio-psycho-social model confers a responsibility from doctors and a more complex therapeutic approach regarding the causes of some diseases.

The number of cases of thyroid disease in the last decade has shown a growing trend worldwide, and diabetes has become one of the major global health problems in recent years. Psychosocial problems that may be the cause of incomplete remission of endocrine diseases suggesting the need for an adjunctive approach to drug treatment, a psychosomatic approach to the disease. The way a person perceives the world and reacts to, it is influenced by the personality, the coping strategies used, the cognitive patterns rooted in childhood and the rational or irrational attitudes / beliefs. This new psychosomatic approach of diseases and the psychotherapeutic interventions would increase the chances of achieving full recovery in a significant proportion of the patients.

The main objective of the doctoral thesis was to screen personality traits, coping strategies, attitudes / beliefs and cognitive patterns in patients with thyroid disease and diabetes in order to develop and implement a psychotherapeutic intervention program based on techniques in cognitive behavioral and emotional therapies.

General method

The present research includes 3 prospective case-control clinical trials. The patients come from Mureş County and the neighboring counties of Harghita, Bistriţa and Alba. Patients were recruited in a private endocrinology clinic in Tg. Mureş. The target group consisted of patients diagnosed with thyroid disease (hyper or hypothyroidism) and type 1 and type 2 diabetes. The control group consisted of healthy volunteers.

The first study assessed the role of psychological mediators (personality, coping strategies, cognitive patterns and attitudes and beliefs) in thyroid disease and diabetes. In the second study, we evaluated changes in the level of depression, anxiety and coping strategies in patients with thyroid disease before and after pharmacologic treatment. In the third study, we evaluated the effectiveness of psychotherapeutic intervention (based on cognitive behavioral and emotional therapies) in restructuring dysfunctional coping

strategies, maladaptive cognitive patterns and irrational thoughts in patients with thyroid disease.

General results

The results of the first study highlighted the psychological characteristics of patients with thyroid disease and diabetes. These psychological characteristics of patients with thyroid disease and diabetes describe a personality with a high level of neuroticism / anxiety, aggression and hostility, with a high level of activity (in diabetes), dysfunctional coping strategies, irrational thinking and maladaptive cognitive patterns. Study 2 showed that drug treatment in thyroid disease decreases the level of depression and anxiety, but does not make a significant contribution to/in changing the dysfunctional coping strategies used by patients with thyroid disease. Based on the results of previous studies, we designed a psychotherapeutic intervention program for patients with thyroid disease. Following the 8-session psychotherapeutic intervention, we managed to restructure dysfunctional coping strategies, irrational thoughts and ill cognitive patterns.

General conclusions

Screening for psychological factors (possible mediators in thyroid disease and diabetes) has shown that patients with thyroid disease and diabetes have slight differences in personality, coping strategies, cognitive patterns, attitudes and beliefs, and both patient groups differ significantly compared to the control group. However, the differences found can help us a lot in developing psychotherapeutic intervention programs as effective as possible in order to reduce the psychological factors that can sustain somatic disease. In the light of the present studies we can say that the medicine of the present and the future must integrate in the therapeutic plan in addition to the pharmacologic treatment also the psychotherapeutic interventions in order to achieve well-being and reduce the incidence of chronic thyroid disease in particular and any somatic disease in general.

The originality of the thesis

Studies on the role of psychological mediators in thyroid disease and diabetes are few and they address the issue very sequentially. The original contribution comparing to other studies is to highlight a psycho-behavioral and emotional profile of patients with thyroid disease and diabetes, based on which we developed a psychotherapeutic intervention with effective results in restructuring cognitive patterns, irrational thoughts and dysfunctional coping strategies complementary to drug therapies. In order to support the efficacy of psychotherapeutic interventions in study 2, it was highlighted that dysfunctional coping strategies of patients with thyroid disease that have a role in maintaining the disease do not change significantly after drug treatment but have changed significantly following the proposed psychotherapeutic intervention.