

Commentary

The Paradox of Psychological Denialism in Supporting Thyroid Patients

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Scientific literature has clearly demonstrated the impact of psychological stress on thyroid function. However, despite this robust evidence, the integration of psychological stress management in the clinical care of thyroid patients remains minimal. This article explores the paradoxical denial of psychological factors in the clinical management of thyroid disorders and highlights the critical role psychologists could play in improving outcomes through targeted stress interventions. A comprehensive bio-psycho-social framework is proposed as a more effective model for supporting thyroid patients, encouraging better interdisciplinary collaboration.

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The functioning of the thyroid complex—that is, the system of organs, glands, and essential nutrients required for optimal thyroid hormone activity—can only be fully understood within a **bio-psycho-social** framework^[1].

Any alternative model known to date is not sufficiently comprehensive to describe the complexity of thyroid interactions and may even pose clinical risks due to its overly reductionist approach.

Attempting to resolve thyroid issues with solely biological or molecular “solutions” reflects a reductionism (unfortunately common even in clinical settings) that disregards scientific evidence on the psychological and social impact on thyroid dynamics.

The limitations of the reductionist approach—which assumes molecular-level analysis of thyroid problems is sufficient—are not only conceptual (e.g., inconsistency with the more sophisticated bio-psycho-social model proposed by the World Health Organization^[2] and Engel^[3]) but are also evident in the low therapeutic efficacy of pharmacological treatment. In Italy alone, 40% of hypothyroid patients are dissatisfied with purely pharmacological treatment^[4].

Within the bio-psycho-social paradigm, the role of psychological stress management significantly impacts the thyroid complex. For years, substantial scientific evidence has detailed the mechanisms through which mental events alter thyroid dynamics and thus the symptoms experienced by patients with thyroid issues^{[5][6][7][8][9][10][11]}.

In summary, scientific evidence now firmly demonstrates how psychological stress affects multiple key factors for thyroid function, including:

- Production of TSH (Thyroid Stimulating Hormone).
- Production of thyroid hormones (T4, T3, etc.).
- Conversion of T4 into T3.
- Conversion of T4 into reverse T3 (RT3).
- Tissue sensitivity to thyroid hormones in various organs (liver, gut, etc.).
- Composition of the gut microbiota.
- Intestinal permeability.
- The immune system.

As shown above, we now have scientific evidence even on the physiological and cellular details of these processes. In fact, for decades now, the field of **functional medicine** has acknowledged psychological stress as a causal factor in thyroid dysfunction^[12].

While academia fully recognizes that psychological factors affect thyroid dynamics, what is the actual situation in clinical practice?

Clinically speaking, we face a paradox: despite the robust scientific evidence confirming the role of psychological stress in thyroid dynamics, most professionals in the field (physicians, endocrinologists, psychologists, nutritionists) behave as if this knowledge did not exist.

Endocrinologists—physicians specialized in endocrine disorders—though aware of the literature on the psychological impact on thyroid health, generally lack training in psychological stress and therefore exclude this aspect from their protocols. They also rarely refer patients to the most appropriate healthcare professional for stress management: the psychologist.

This is also due to a prevailing biomedical educational culture that overestimates the influence of biological/molecular factors and underestimates the psychological and social ones. Consequently, the vast majority of physicians/endocrinologists and nutritionists greatly undervalue the importance of psychological stress management in thyroid health.

The paradox of psychological denialism also applies to psychologists themselves, although for different reasons than their biomedical colleagues.

Psychologists, despite receiving training that better balances biological, psychological, and social factors, are generally aware that thyroid dysfunction can lead to anxiety and depression. However, unfamiliarity with the specific scientific literature showing the reverse causal relationship (i.e., how stress management affects thyroid function) leads them to significantly underestimate their own role in supporting thyroid patients.

Thus, although psychologists are the most qualified professionals in managing psychological stress, they often underestimate the now well-documented mechanisms by which stress affects the thyroid complex—and, as a result, their own critical clinical role.

In practice, psychologists today tend to treat patients with anxiety or depression in the same way, regardless of whether the patient has a thyroid condition or not. This lack of targeted, personalized care undermines the effectiveness of psychological interventions for thyroid patients.

Further evidence of this underestimation is the almost complete lack of psychological services specifically designed for thyroid patients—both in Italy and internationally. A quick web search in either Italian or English confirms this absence, whether among individual practitioners or institutions.

For instance, even the 2019 CNOP [National Council of Italian Psychologists] report *"The Role of Psychologists in the National Chronic Disease Plan"* contains no mention of psychological support for thyroid patients—despite over six million people in Italy suffering from chronic thyroid conditions^[13].

Just as the endocrinologist is the most suitable professional for addressing the biochemical aspects of thyroid disorders, the psychologist specialized in stress management is the most appropriate healthcare provider to improve the well-being of thyroid patients.

Naturally, managing the biochemical aspects of thyroid conditions requires specific professional skills. But equally, managing psychological stress demands specific training grounded in current scientific knowledge to avoid generic, non-personalized, and potentially harmful interventions.

It is worth emphasizing that in Italy, the psychologist is the only legally recognized healthcare professional specializing in psychological health and well-being using scientifically validated psychological methods^[14].

In conclusion, scientific research clearly highlights the importance of psychologists in effectively supporting thyroid patients and in prevention efforts. However, this role remains underrecognized—

even within the psychology profession itself—due to limited cultural and educational awareness.

The hope is that psychologists will soon address this educational gap, so they can reach and truly help the millions of people who would benefit from targeted psychological interventions alongside the necessary biomedical care.

In this sense, the national task force established by FIMMG [Italian Federation of General Practitioners] and CNOP [National Council of Italian Psychologists] to define a collaborative intervention model for integrating psychology into primary care^[15] represents a valuable first step. It should now explicitly include thyroid patients in its scope of integrated care between physicians and psychologists.

Statements and Declarations

Conflicts of Interest

The author declares no conflicts of interest.

Author Contributions

The author is solely responsible for the entire content of the manuscript.

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