An Interdisciplinary Approach to Medical Discourse: Analyzing Patients’ Speech
Efthymia M. Tsaroucha1*, Dimitrios T. Karalis2 & Angeliki Kleisi-Karali3
1Adjunct Lecturer of Linguistics & Post-doctoral Researcher, Foreign Languages Centre, University of Thessaly, 38221 Volos, Greece
2Adjunct Lecturer, Department of Nutrition and Dietetics, University of Thessaly, Registered Endocrinologist, Member of the Hellenic Endocrine Society, Greece
3BA in Greek Philology, Hellenic Open University of Cyprus, MSc in Bioethics, School of Medicine, Democritus University of Thrace, Greece
Corresponding Author: Efthymia M. Tsaroucha, E-mail: efiaeris@yahoo.gr

This paper argues for an interdisciplinary approach to medical discourse and aims to analyze patients’ speech. The paper investigates the case of subclinical hypothyroidism and attempts to build bridges between the disciplines of medicine and linguistics. It is suggested that the way patients think of this disease and utilize language in order to express its symptoms is affected by the abnormal TSH level and the normal levels in T3 and T4 thyroid hormones. The article further attempts to propose that human thought and language use are shaped by environmental factors such as chronic diseases. The paper discusses how patients of subclinical hypothyroidism, whose mother tongue is Modern Greek, use language figuratively by means of metaphor and metonymy.

**KEYWORDS**
medical discourse; interdisciplinary approach; medicine; linguistics; patient’s speech; subclinical hypothyroidism; disease; language use; figurative language; metaphor; metonymy

**INTRODUCTION: SUBCLINICAL HYPOTHYROIDISM**
Subclinical hypothyroidism is a mild dis-regulation of the thyroid function which is (laboratory) characterized by increased TSH levels, normal levels of thyroid hormones (T3 and T4), increased levels in antithyroid antibodies (aTPO και aTG) (Archimandrites; 2010). Patients of subclinical hypothyroidism have little or no symptoms of hypothyroidism (Fauci et al.; 2010). Subclinical hypothyroidism was firstly recorded as a disease in 1965 by Buchan and Harden. Afterwards, many researchers investigated the disease and affirmed its relation with autoantibodies’ attack to the thyroid gland (Bastenie & Ermans; 1972). Research has also confirmed how subclinical hypothyroidism is related to increased levels in total cholesterol (Pallas et al.; 1991) as well as to neuropsychiatric disorder (Haggerty et al.; 1997).

Patients of subclinical hypothyroidism are likely to suffer from clinical hypothyroidism, if they neglect medication and if they skip annual visits to registered endocrinologists (Koutras et al.; 1994). As far as the clinical picture of subclinical hypothyroidism is concerned, its symptoms are quite rare. Some of the most common symptoms are: fatigue, weakness, sleepiness, irritability, heart palpitations, bronchocele, hypercholesterolemia as well as depression.

Published by Al-Kindi Center for Research and Development. Copyright (c) the author(s). This is an open access article under CC BY license (https://creativecommons.org/licenses/by/4.0/)
The present paper suggests that patients’ description of subclinical hypothyroidism is shaped and structured by its symptoms and clinical picture. Therefore, a discourse analysis of subclinical hypothyroidism indicates that language use is determined by environmental and physical factors.

Defining Discourse
According to Sifianou (2001: 1), the term ‘discourse’ refers to language produced by its users, interaction is implied and it extends to cover longer stretches of language, rather than only sentences and utterances. ‘Discourse’ is something broad and diverse as it is applied both to written and spoken language; thus, “discourse analysis” explores who uses the language, to whom, why, when, where and how (ibid).

Context plays a very important role in order to comprehend the notion of discourse. Context is co-text, and co-text refers to the linguistic environment of an utterance. According to Sifianou (2001: 62, 73), context is interrelated with text as it exists prior to it and includes social and cultural information. Thus, it is composed of three main levels: the social, situational and cultural level.

Context is determined by situational and cultural information and is shaped by selection, coercion and modulation. As Cook (1989: 4-6) points out context constitutes a dynamic model that changes due to backgrounds including either the notion of ‘local’ or ‘global’ meaning. According to this idea, discourse is context that underlies meaning. Discourse is defined as language in use (with or without grammaticality) and presupposes the existence of coherence in order to have meaningfulness and unity (ibid).

Review of the Literature of Metonymy and Metaphor
Metonymy constitutes a fundamental cognitive ‘tool’. Taylor (1989: 124) stated that its essence “resides in the possibility of establishing connections between entities which co-occur within a given conceptual structure”. According to Panther & Radden (1999: 2), metonymy is a process in which one conceptual entity, ‘the target’, is mentally accessible by means of another conceptual entity, ‘the vehicle’. Langacker (1993: 30) argued that “metonymy is basically a reference- point phenomenon [...] affording mental access to the desired access”.

One of the most important notions encouraging metonymy is the notion of contiguity. Ullman (1957), Lakoff and Johnson (1980) and Taylor (1989) argued that metonymy could be defined as a shift of a word meaning from the entity it stands for to a ‘contiguous’ entity. Various proposals have been developed for the notion of contiguity. Lakoff and Johnson (1980) claimed that contiguity deals with the whole range of associations which are commonly related to an expression.

Other studies approached contiguity in terms of encyclopedic knowledge. Haiman (1980) and Langacker (1987) stated that encyclopedic knowledge means that everything we know about a concept is part of its meaning. According to Langacker (ibid), some knowledge is more central than some other knowledge. Accordingly, Langacker (ibid) argued for a pattern of centrality and peripherality according to which the meaning of one word can be distinguished from the meaning of another word.

As far as metaphor is concerned, Lakoff and Johnson (1980: 453) stated that for most people, metaphor constitutes a device of poetic imagination; metaphor is a matter of extraordinary rather than ordinary language and is typically viewed as a characteristic of language alone.

The framework of cognitive linguistics sees metaphor as being pervasive in everyday life, not just in language but in thought and action as well (Lakoff & Johnson 1980: 454). Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature in the sense that “[t]he concepts that govern our
thought are not just matters of the intellect. They also govern our everyday functioning to the most mundane details. Our concepts structure what we perceive, how we get around in the world, and how we relate to other people. Our conceptual system thus plays a central role in defining our everyday realities” (ibid: 454).

According to Mac Cormac (1988: 127), metaphor constitutes a knowledge process because the human mind combines concepts that are not normally associated in order to form new concepts and this cognitive ability operates either consciously or subconsciously (in a broader context where the human mind functions in the physical world).

In addition, Bartsch (2002: 49) claimed that metaphors are generated on the experiential level of concept formation (conceptual metaphors) as well as on the theoretical level of linguistically explicated concepts (linguistic metaphors). Feder-Kittay (1989: 13-14) stated that “a metaphor provides the linguistic realization for the cognitive activity by which a language speaker makes use of one linguistically articulated domain to gain an understanding of another experiential or conceptual domain”.

To conclude, Croft and Cruse (2004: 55) stated that metaphor involves a relationship between a source domain (namely “the source of the literal meaning of the metaphorical expression”) and a target domain (namely “the domain of the experience actually being described by the metaphor”). Definitions of metaphor suggest that “[...] two elements are brought together but the source domain loses its existence when mapped onto the target domain; although the source domain itself is wiped out, some aspects of its own nature or structure are transferred to that of the target domain” (Dirven 2002: 100).

**Patients’ Speech**

This section discusses how patients of subclinical hypothyroidism, whose mother tongue is Modern Greek, refer to its symptoms. As far as heart palpitations are concerned, patients use expressions such as my heart is fluttering [η καρδιά μου φτερουγίζει] and my heart is hopping [η καρδιά μου χοροπηδάει]. The expression my heart is fluttering is a metaphor because we have two domains, the first domain is the beating of the heart and the second domain the motion of a bird’s wings. The encouraged conceptual metaphor is THE BEATING OF THE HEART IS THE FLUTTERING OF A BIRD’S WING. The expression my heart is hopping is a metaphor because the heart is described as a bouncing object.

As far as the symptom of sleepiness is concerned, patients refer to subclinical hypothyroidism as I haven’t glutted my sleep [δεν έχω χορτάσει τον ύπνο μου] and I am a mountain [είμαι βουνό]. The expression I haven’t glutted my sleep can be seen both as a metaphor and as a metonymy. The metaphorical reading is that sleep is described as food. The metonymic reading of this expression suggests that feeling full of something is like having your stomach full. The expression I am a mountain is used metaphorically because the patients feel that they cannot move.

Patients describe headaches, fatigue and irritability with expressions such as I feel my head as a hammer [νιώθω το κεφάλι μου αφυρί] and my whole world is blurring [ολόκληρος ο κόσμος μου θαμπώνει]. The expression I feel my head as a hammer is a metaphor because it refers to the weight of a hammer. Therefore, patients feel that their heads heavy as a hammer. The expression my whole world is blurring has a metonymic reading because the patient perceives his/her eye-sight difficulty as foggy lenses.

**Conclusion**

An interdisciplinary approach to medical discourse suggests that patients’ description of the symptoms of subclinical hypothyroidism is governed by metaphors and metonymies. Such metaphors and metonymies are representative of the way they experience the symptoms of headache, fatigue, irritability and weakness. Thus, an
Interdisciplinary approach to medical discourse suggests that linguistic expressions are structured and shaped by environmental and physical factors.

References


