

## Impact of Hypothyroidism on Social Relationship

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### ABSTRACT

Hypothyroidism is common disease throughout the world which creates physical and psychological problems and outcome is social isolation with physical appearance changes. Fatigue, weight gain, cold intolerance, swelling of hands and feet, puffy face, joint and muscle pain, constipation, dry skin, dry and thinning hair and decreased sweating are physical symptoms and depression, anxiety, mood swings, feel difficulties with concentration, short-term memory lapses, lack of interest and mental alertness are observed as psychological symptoms. There is a strong link between psychological health, physical health and social relationships. Social relationships affect health through behavioral, psychosocial, and physiological pathways. Quality of relationships includes positive aspects of relationships and for healthy relationship psychological and physical health should be tremendous.

**Keywords:** *Hypothyroidism, Psychological Symptoms, Social Integration, Depression, Mood Swings.*

Hypothyroidism is a stereo typed complex disease with multiple physiological and psychological signs and symptoms, that can have a considerably negative impact on quality of life (McMillan et al., 2004), including exercise related constraints, reduced physical performance (Lankhaar et al., 2014; McAllister et al., 1995) lethargy, constipation, cold intolerance, intellectual and motor dullness, dry skin, hoarse voice, slowed reflexes, and bradycardia are considered to be typical symptoms. Hypothyroidism can be classified on the basis of its time of onset and its severity (Cg 2004). Hypothyroidism is a common disease in adults. A survey (Tachman et al., 1984) indicated that 1.4% of women and 0.1% of men are suffering from hypothyroidism. This implies that significant numbers of patients may have unusual symptoms without being seen by their physicians. A review of 400 cases (Nickerson et al., 1960) illustrated that most of the above-mentioned symptoms of hypothyroidism are present in only 25-70% of patients (Faggiano et al., 2011). Patients affected with thyroid diseases displayed significant impairment in health-related quality of life when compared to the healthy people (Wong et al., 2010). About 50% of patients affected with thyroid diseases are limited in daily activities and report having social and emotional problems. The reasons for the quality-of-life impairment in patients with thyroid disorders remain to be clarified (Johar et al., 2014).

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The quality of life is defined as the perceptions of an individual regarding his / her position in life in the context of the culture and value systems in which he / she lives and in relation to his / her goals, expectations, standards and concerns (WHOQoL, 1993). Health related quality of life refers to a multidimensional concept that includes discernment of negative and positive aspects of physical, emotional, social and cognitive functions, which could be affected by the disease or its treatment (WHOQoL, 1993). Social integration is defined as participation in a extensive range of social relationships (Brissette 2000) and it is a multidimensional construct thought to include a behavioral component and a cognitive component (Brissette, 2000).

Demartini et al., found that 63.4% of hypothyroid patients had a diagnosis of depressive nature with anxiety while 63.5% had psychological disorders (Demartini et al., 2010; Demartini et al., 2014). The most frequent symptoms were anxiety and somatization, cognitive impairment disturbances, psychomotor retardation and sleep disorders, which all may end with social isolation and loneliness feelings. Guimaraes et al., estimated that 45.7% of hypothyroid patients suffering with depressive symptoms (Guimaraes et al., 2009). Females with high TSH rather than prescribed standards had elevated depressive symptoms when compared with normal levels of TSH. In a wider context, many studies have focused on the relationship between social isolation and chronic diseases. There has been no consensus regarding the nature and significance of this relation, as some studies have confirmed this relation but other studies have failed to find any such association (Roca et al., 2015).

There are very few studies that have been performed to assess the relationship between social relationship and hypothyroidism. This, evidence-based research aimed to determine the associations between social relationship and hypothyroidism. Hypothyroidism can affect emotional or mental health symptoms (Dayan et al., 2013) as well as physical symptoms (Tachman et al., 1984).

### *Physical Symptoms*

- *Circulatory and cardiovascular systems:* Hypothyroidism slows your heart rate and weakens your heartbeat, making your heart less efficient at pumping blood out to your body.
- *Nervous system:* Suffering from peripheral neuropathy includes numbness, tingling, pain, or burning in the affected parts of your body.
- *Respiratory system:* Patients feel short of breath, have trouble exercising or sleep apnea.
- *Digestive system:* Hypothyroidism slows the movement of food through your stomach and intestines. Slowed digestion can lead to symptoms like heartburn, constipation, and bloating.
- *Reproductive system:* Women with hypothyroidism may have irregular periods, heavy periods or missed periods. They can have trouble getting pregnant or be more likely to have a miscarriage if they do get pregnant.
- *Other systems:* Patients of hypothyroidism also affected with fatigue, weight gain, cold intolerance, swelling of hands and feet, puffy face, joint and muscle pain, constipation, dry skin, dry and thinning hair and decreased sweating.

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### *Psychological Symptoms*

- Hypothyroidism make more emotional than patients felt before and find changes in mood, sometimes rapidly and unpredictably. Common emotional problems are:
- *Depression*: Depression may occur early in hypothyroidism and may become more severe over time. Hypothyroidism can also cause slowed mental functioning with low mood and difficulty enjoying things, tearfulness, loss of appetite and disturbed sleep.
- *Anxiety*: Hypothyroidism create a feeling of nervousness with butterflies, heart racing and trembling
- *Mood swings*: Irritability, snappiness or short temper which people often call moodiness.
- *Others*: Feel difficulties with concentration, Short-term memory lapses, lack of interest and mental alertness.

### *Social Relationship of Hypothyroid Patients*

Social contextual feelings such as loneliness, affect the thyroid performance and adaptive immune system. A study showed more fluctuation in thyroid hormone secretion among people who are not social, so the study indicates that people who receive social support have relatively stable thyroid hormone secretion (Kim et al., 2017). In a study performed in 1999, they studied the difference between healthy and chronically ill people and found greater feelings of loneliness in ill people (Penninx et al., 1999). Adequate social support has an association with better health and lowers loneliness among people (Segrin et al., 2011).

Depression with a poor mood is one of the reported effects of clinical hypothyroidism and that intimately reflects the mood related symptoms of people with a depressive disorder such as major depression, minor depression or loneliness feelings (Russell et al., 1984). Physicians mostly check for other related clinical features of hypothyroidism to distinguish hypothyroidism related mood disturbance from other common sources of a persistently depressed mood (Carta et al., 2002). A review published in 2012 indicates the link between thyroid problems and psychosocial disorders (Fukao et al., 2003).

Many studies provide evidence that social relationship influence health behavior (Umberson et al., 2010). Berkman and Breslow's study showed that greater overall involvement with formal and informal social ties was associated with more positive health behaviors (Berkman, 1983). Being married, having children (Denney, 2010) and ties to religious organizations have all been linked to positive health behaviors. Social ties influence health behavior because they influence or control our health habits (Umberson et al., 2010). During a study it was observed that a spouse may monitor, inhibit, regulate or facilitate health behaviors in ways that promote a partner's health (Waite, 1995).

Social support refers to the emotionally sustaining with quality of relationships Many studies establish that social support benefits physical health (Cohen, 2004) and have indirect effects on mental health by reducing the impact of stress or by fostering a sense of meaning and purpose in life (Cohen, 2004). Supportive social ties may trigger physiological sequelae that are beneficial to health and minimize unpleasant excitement that instigates risky behavior (Uchino, 2006). The spread of obesity across social networks appears to be influenced by perceptions of social norms about the acceptability of obesity and related health behaviors among network members who are socially close, rather than geographically closer (Christakis et al., 2007). In a more fundamental way, greater social connection may

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foster a sense of coherence or meaning and purpose in life, which enhances physiological processes, and physical health (Antonovsky, 1987).

Mental health is a fundamental mechanism that works in concert with each of the other mechanisms to shape physical health (Chapman, 2005). For instance, the emotional support provided by social ties enhances psychological well-being, which may reduce the risk of unhealthy behaviors and poor physical health (Kiecolt-Glaser et al., 2002). The World Health Organization identifies mental health as an essential dimension of overall health status (World Health Organization, 2007).

### CONCLUSION

Hypothyroidism is result of abnormal thyroid hormone levels and side effect of the treatment and it create physical and psychological disorder. Social relationships affect a range of health outcomes, including mental health, physical health, health habits, and mortality risk. Sociologists have played a major role in establishing these linkages.

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### ***Conflict of Interest***

The author(s) declared no conflict of interest.

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