

AWARENESS ON THYROID DISORDERS AMONG FEMALE PROSPECTIVE TEACHERS

¹M. MARIA SAROJA, ²E. MICHAEL JEYA PRIYA

¹Research Director, IQAC Coordinator and Associate Professor of Biological Science,
St. Ignatius College of Education(Autonomous), Palayamkottai, Tirunelveli-627002, Tamilnadu, India

²Assistant Professor of Biological Science, St. Ignatius College of Education(Autonomous), Palayamkottai,
Tirunelveli-627002, Tamilnadu, India, pri.inigo@gmail.com

Abstract

Thyroid disorders are common among women. Thyroid gland secretes Triiodothyronine(T3) and Thyroxine (T4) hormones which play a significant role in metabolism. It occurs due to the imbalance of thyroid hormones in the body. Undiagnosed and untreated thyroid disorders during pregnancy lead to premature delivery, miscarriage and stillbirth. It may also lead to preeclampsia, postpartum, haemorrhage and anaemia. So the students show be aware of thyroid disorders. The study's main objective was to find out the awareness of thyroid disorders among prospective female teachers in the Tirunelveli District. Survey method was adopted in the study. Sample consists of 300 Prospective teachers in the Tirunelveli district. Maria Saroja, M and Michael Jeya Priya. E (2020) developed the thyroid Disorders Awareness Scale (TDA). M has been used for collecting data. Mean, SD and 't'-test was used for analysis the data. The present study revealed a significant difference among female prospective in their awareness of thyroid disorders.

Keywords: Triiodothyronine, Thyroxine and Thyroid disorders.

INTRODUCTION

The thyroid gland is an endocrine organ located in the anterior aspect of the neck in front of the trachea. The function of this gland is to produce a sufficient amount of thyroid hormones which will primarily influence the metabolic rate and protein synthesis. Thyroid hormones also have other effects, such as developing tissues and organs. Thyroid hormones have metabolic activity in various organs; their disorders are manifested with many symptoms throughout the body (Serin, S.O. Etal, 2016). The five common thyroid diseases in India are hypothyroidism, hyperthyroidism, goitre and iodine deficiency, Hashimoto's thyroiditis and thyroid cancer (Unnikrishnan, A.G., & Menon, U.V. 2011).

The prevalence and pattern of Thyroid disorders depend on sex, age, ethnicity, and geographical factors, especially on iodine intake (Nimmy, N.J. Et al. 2012). Hypothyroidism can contribute to morbidity from Osteoporosis, Hyperlipidemia, Hypercholesterolemia, Cardiovascular and Neuropsychiatry disease (Hitman, s., & Kelly F.C, 1999). Hyperthyroidism is the increased secretion of thyroid hormones by the thyroid gland. Causes of primary hyperthyroidism include Graves' disease, cancer, solid hypersecreting nodules, and toxic multinodular goitres. Thyroiditis is another form of hyperthyroidism caused by either the excessive ingestion of thyroid hormones or altered synthesis of the hormone in the body. Signs and symptoms of hyperthyroidism include increased metabolism, heat intolerance, and

increased stimulation of the sympathetic nervous system (Burton, 2011). Untreated hyperthyroidism leads to atrial fibrillation, congestive heart failure, osteoporosis, and thyroid storm.

The prevalence of goitre increases with the severity of iodine deficiency and becomes endemic in populations where the intake of iodine is less than ten μg per day (Hertzel, B.S.1989). Persistent iodine deficiency can eventually affect growth and mental development in all age groups. Hashimoto's thyroiditis (HT) is one of the commonest autoimmune endocrine diseases in the paediatric age group. It is considered a typical, organ-specific, autoimmune disease, characterized by autoimmune-mediated destruction of the thyroid gland.

The hypothalamic-pituitary axis regulates the production of thyroid hormone through stimulating thyroid hormone from anterior pituitary gland and thyroid releasing hormone from the hypothalamus. Prevalence of thyroid disorders is a prevalent medical condition. Symptoms of thyroid disorders depend on the state of thyroid gland functions. The thyroid function can be primarily affected by the gland itself (most common) or secondarily affected by higher centers signals in the brain (hypothalamic-pituitary axis). This effect on gland function will result in two disorders: hypothyroidism and hyperthyroidism. Hypothyroidism is the most prevalent type affecting 4-5% in developed countries. While it's more common in areas with iodine deficiency, the pattern of the disorder's distribution depends on age, ethnicity, and geographic factors, especially in iodine-deficient areas. Despite being one the most prevalent medical condition, thyroid disorders are the most underdiagnosed and neglected chronic health conditions globally. So the present study focuses on the awareness of thyroid disorder among prospective female teachers.

SIGNIFICANCE OF THE STUDY

Thyroid dysfunction is one of the most common endocrine disorders seen in clinical

practice. The prevalence of thyroid dysfunction varies by age, sex, race/ethnicity, and geography through variations in dietary iodine intake. Low thyroid hormones in the blood cause decrease in the overall basal metabolic rate of the body, whereas high thyroid hormones increase the overall basal metabolic rate. During pregnancy, thyroid hormones are crucial for developing the brain and nervous system of the foetus. The foetus solely depends on its mother's thyroid hormone supply during the first three months of pregnancy as the foetus starts to produce its thyroid hormones at around 12 weeks. Undiagnosed and untreated thyroid disorders during pregnancy may increase the risk for miscarriage, premature delivery, stillbirth or a baby born with low I.Q. Thyroid disorders may also put pregnant women at risk for preeclampsia, postpartum haemorrhage and anaemia. Hyperthyroidism occurs when your thyroid is overactive or overproduces thyroid hormones. Graves' disease, an autoimmune disorder, is the primary cause of hyperthyroidism, but thyroid inflammation can also lead to excess hormones. Hypothyroidism results when your thyroid is underactive or doesn't produce enough thyroid hormones. An autoimmune condition called Hashimoto's disease causes the immune system to attach to the thyroid. While hyper and hypothyroidism are the most common forms of thyroid disease, other conditions can impact the health of the thyroid. These include thyroid nodules, goitres, thyroid swelling, and thyroid cancer.

OBJECTIVES OF THE STUDY

- To find out the level of awareness on thyroid disorder among female prospective teachers
- To find out whether there is any significant difference between female prospective teachers in their awareness on thyroid disorder with reference to following background variables

(i) Type of family (ii) Location of Home Environment (iii) Department (iv) Type of Family (iv) Father's educational qualification (v) Mother's educational qualification

HYPOTHESES OF THE STUDY

- Awareness on thyroid disorder among female prospective teachers are moderate.
- There is no significant difference between college students in their awareness on thyroid disorder with reference to following background variables

(i) Type of family (ii) Location of Home Environment (iii) Department (iv) Type of Family (iv) Father's educational qualification (v) Mother's educational qualification

POPULATION AND SAMPLE

The population includes female prospective teachers in Tirunelveli District. The investigators used simple random sampling technique and randomly selected 300 female prospective teachers in Tirunelveli District.

STATISTICAL TECHNIQUES USED IN PRESENT STUDY

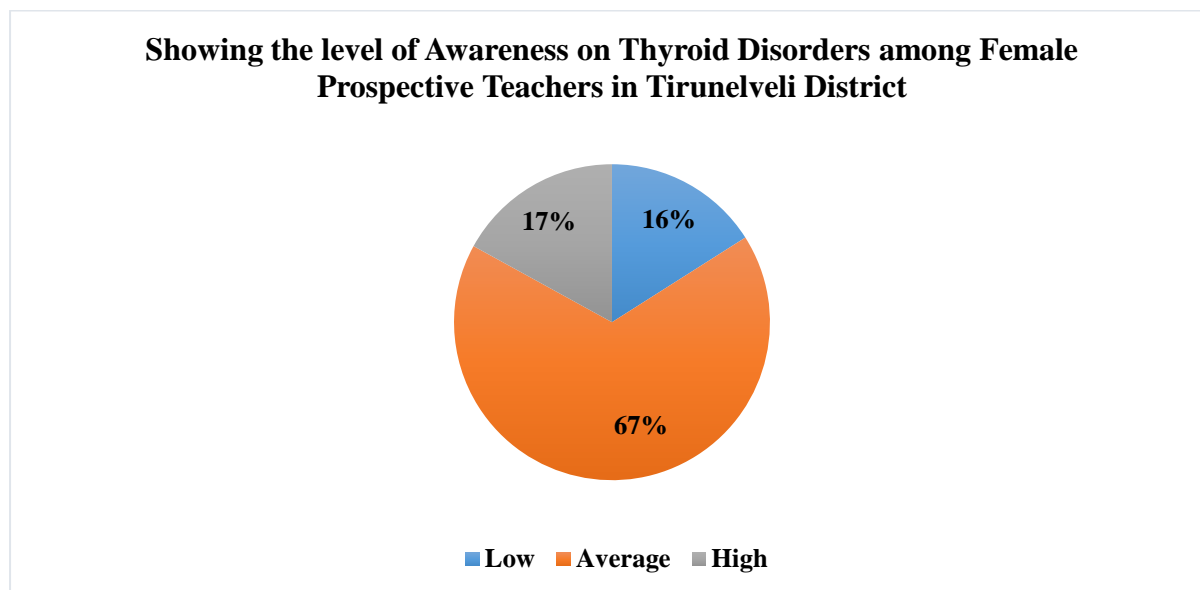
Thyroid Disorder Awareness Scale was developed by Maria Saroja, M and Michael Jeya Priya, E (2020) Mean, Standard deviation and 't' were the statistical techniques used for carrying out the analysis of data.

ANALYSIS AND INTERPRETATION

Table 1. *Showing the level of awareness on thyroid disorders among female prospective teachers in Tirunelveli District*

Awareness on Thyroid Disorders among Female Prospective Teachers	Low		Average		High	
	Count	%	Count	%	Count	%
	48	16.00	201	67.00	51	17.00

Figure.1.



Interpretation of table-1

It is revealed from above table that 16.00%, 67.00% and 17.00% of Prospective teachers

have low, average and high level of Awareness on Thyroid Disorders among Female Prospective Teachers.

Table2. *Difference between rural and urban female prospective teachers in their awareness on thyroid disorders*

Background variables	Categories	N	Mean	SD	Calculated 't' value	R
Location of Home environment	Rural	92	59.08	12.511	5.77	S
	Urban	208	70.22	15.164		

Interpretation of table-2

It is inferred from the above table that there is significant difference between rural and urban female prospective teachers in their awareness on thyroid disorders. Hence the null hypothesis is rejected. The urban students have high awareness on thyroid disorder than rural students. This may be due to the fact that urban

students have exposure to participate in the awareness activities like medical camps, awareness talk, seminars and webinars related to the disorders compared to the rural students. This study contradicted by the study conducted by the Treki et al (2019) there is no significant relationship between the living areas and their awareness and knowledge in the thyroid disorder.

Figure.2

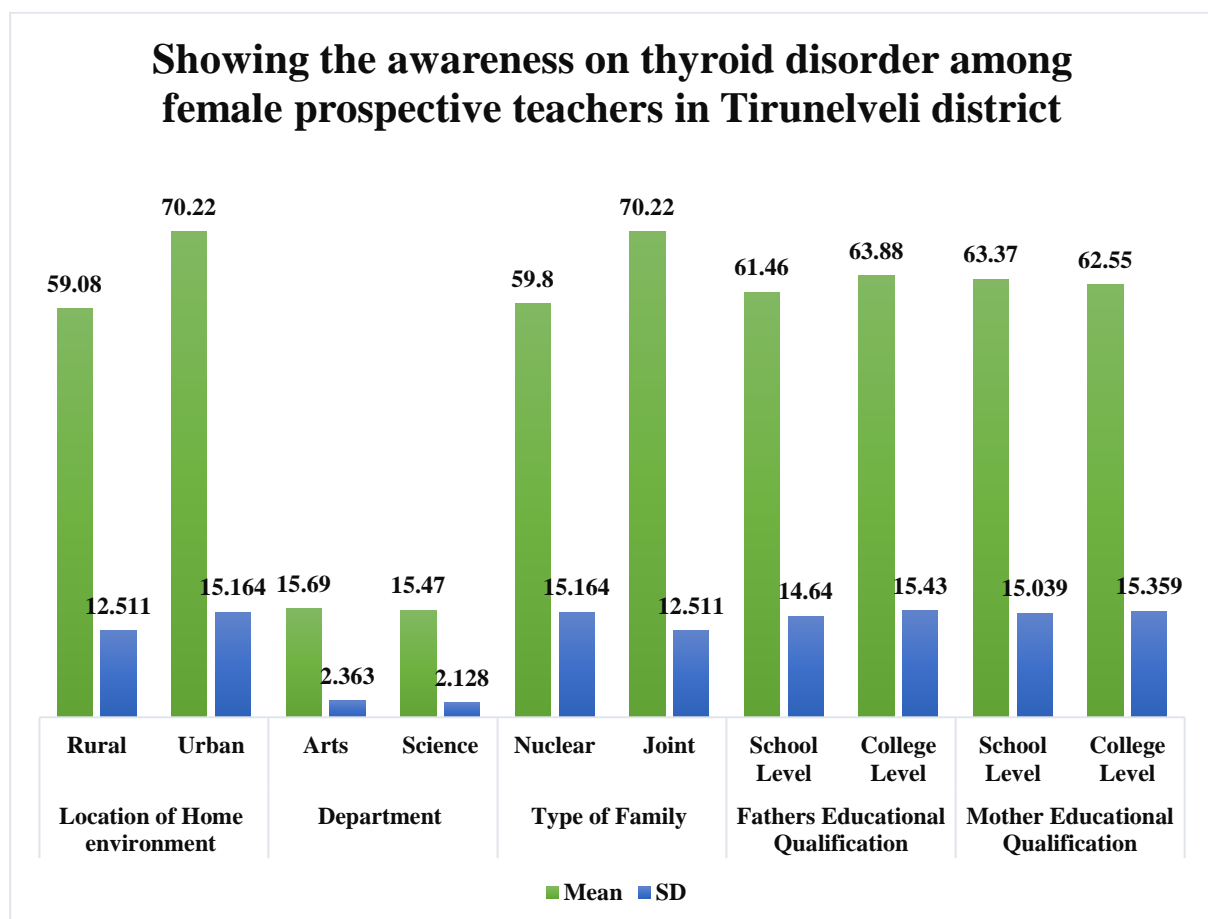


Table 3. *Difference between arts and science female prospective teachers in their awareness on thyroid disorders*

Background variables	Categories	N	Mean	SD	Calculated 't' value	R
Department	Arts	140	15.69	2.363	0.831	NS
	Science	160	15.47	2.128		

Interpretation of table-3

It is inferred from the above table that there is no significant difference between arts and

science female prospective teachers in their awareness on thyroid disorders. Hence the null hypothesis is accepted.

Table 4. *Difference between nuclear and joint family female prospective teachers in their awareness on thyroid disorders*

Background variables	Categories	N	Mean	SD	Calculated 't' value	R
Type of Family	Nuclear	208	59.80	15.164	5.77	S
	Joint	92	70.22	12.511		

Interpretation of table-4

It is inferred from the above table that there is significant difference nuclear and joint family female prospective in their awareness on thyroid disorders. Hence the null hypothesis is rejected. The female prospective teachers in the joint family showed high level of awareness compared to the female prospective teachers

belongs to nuclear family. This may due to the fact that the parents and grandparents spend their leisure time to take of their wards. They prepare healthy diet traditional foods for their grandchildren and give awareness on the importance of balanced diet and iodine intake. They often monitor their wards food habits and share their experience and views on various disorders and disease during their family time.

Table 5. *Difference between school level educated fathers and college level educated fathers of female prospective teachers in their awareness on thyroid disorders.*

Background variables	Categories	N	Mean	SD	Calculated 't' value	R
Fathers Educational Qualification	School Level	110	61.46	14.640	1.13	NS
	College Level	190	63.88	15.430		

Interpretation of table-5

It is inferred from the above table that there is no significant difference between school level

educated fathers and college level educated fathers of female prospective teachers in their awareness on thyroid disorders. Hence the null hypothesis is accepted.

Table 6. *Difference between school level educated mothers and college level educated mothers of female prospective teachers in their awareness on thyroid disorders.*

Background variables	Categories	N	Mean	SD	Calculated 't' value	R
Mother Educational Qualification	School Level	163	63.37	15.039	0.46	NS
	College Level	137	62.55	15.359		

Interpretation of table-6

It is inferred from the above table that there is no significant difference between school level educated fathers and college level educated fathers of female prospective teachers in their awareness on thyroid disorders. Hence the null hypothesis is accepted.

RECOMMENDATIONS

- Awareness seminars and webinars can be organized frequently regarding the disorders.
- Student teachers can be encouraged to participate in the Medical camps organized during the Citizenship Training Camps.
- Brainstorming sessions can be organized to give awareness of the importance of
- To know about the student's health status, constant medical checkups and BMI awareness can be implemented on the college campus.
- A healthy diet menu consisting of Antioxidant-rich fruits and omega-3s can be followed in the hostel.
- Eat right club can be implemented in the college to give awareness to prospective teachers about healthy eating habits.
- Eating together or a family meal can be practised in the family will improve the healthy diet dietary intake among college students.

CONCLUSION

Thyroid diseases have become one of India's most common health concerns, with an increasing number of people being diagnosed with them. One-third of thyroid patients in India remain unaware of their condition. Over time, untreated thyroid dysfunction can lead to obesity, joint pain, infertility, and heart disease. Thyroid disorder is common in women lacking awareness about the harness of information of electronic media usage; poor knowledge leads

to vulnerability to infections. Appropriate knowledge about thyroid disorders will make them conscious of the early discovery of the disease. Health care professionals should focus not only on medication and dose adjustment but also on patient education. Good knowledge and awareness of the condition increases the patient compliance with medications and regular follow up. Children's life style and food habits should be monitored by the parents to avoid disorders. Proper awareness among the prospective teachers can be given through invited talks, group discussion and awareness programme.

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