International Journal of Community Medicine and Public Health
Rana S et al. Int J Community Med Public Health. 2024 Nov;11(11):4285-4289
http://www.ijcmph.com
pISSN 2394-6032 | eISSN 2394-6040

DOI: https://dx.doi.org/10.18203/2394-6040.ijcmph20243287

Original Research Article

Assess the knowledge regarding thyroid disorders among patients attending medical OPD

Sonali Rana[1], Rahul Sati[1], Tabita Thapa[1], Priyanka Rana[1], Manisha Joshi[1], Shama Praveen[2]*, Namrata Pundir[3], Chandan Kumar[4]

[1]Department of BSc Nursing Students, Himalayan College of Nursing, Swami Rama Himalayan University, Dehradun, Uttarakhand, India
[2]Department of Obsterical and Gynaecological Nursing, Himalayan College of Nursing, Swami Rama Himalayan University, Dehradun, Uttarakhand, India
[3]Department of Child Health Nursing, Himalayan College of Nursing, Swami Rama Himalayan University, Dehradun, Uttarakhand, India
[4]Department of Community Health Nursing, Himalayan College of Nursing, Swami Rama Himalayan University, Dehradun, Uttarakhand, India

Received: 20 July 2024
Revised: 18 September 2024
Accepted: 08 October 2024

***Correspondence:**
Dr. Shama Praveen,
E-mail: shamapraveen4@gmail.com

ABSTRACT

Background: The thyroid gland is an endocrine gland consisting of two lobes connected by an isthmus, in the neck. It is found in front of the neck below the Adams apple. Thyroid gland though a small structure on the anterior aspect of neck has many important functions to perform, failing in its duty might lead to serious consequences.
Methods: A non-experimental descriptive research design was conducted to assess knowledge regarding thyroid disorders among patients attending medical OPD in a selected hospital of Dehradun at Uttarakhand. A total of 100 samples were selected through purposive sampling technique. A structured knowledge questionnaire was administered through interview technique to assess the knowledge.
Results: The study showed that the mean knowledge score of patients regarding thyroid disorders was 14.04±3.755. The mean percentage was 14.04. There was significant association between social habits, suffered or suffering from thyroid disorders, family history of thyroid disorders, medical history of any medicine intake and previous knowledge regarding thyroid disorders with knowledge score.
Conclusions: From the findings of the study, it was conducted that Out of 100 participants 42% had good knowledge and 7% had poor knowledge, 38% had average knowledge and 13% had very good knowledge about thyroid disorders. There is a need for educational programs to create awareness and improve knowledge regarding thyroid disorders.

Keywords: Assess, Knowledge, Need based education, Patient attending medical OPD, Thyroid disorders

INTRODUCTION

"Every time you eat or drink, you either feeding your thyroid disease or fighting it."

The thyroid gland is an endocrine gland consisting of two lobes connected by an isthmus, in the neck. It is found in front of the neck below the Adams apple. Thyroid gland though a small structure on the anterior aspect of neck has many important functions to perform, failing in its duty

might lead to serious consequences. Thyroid gland has been the target of interest because of its numerous metabolic, neoplastic and inflammatory aberrations.[1,2]

The thyroid gland functions by producing, storing and releasing hormone into the bloodstream so the hormones can reach to the body cells.[3] The thyroid gland takes up iodine from the food to make two main hormone: triiodothyronine (T_3) & thyroxin (T_4). Hormones T3 & T4 levels are neither too high or too low. The hypothalamus and the pituitary glands communicate to maintain T_3 & T_4 balance in the brain.[4] The hypothalamus produces TSH & TRH that signals the pituitary gland to stimulate the thyroid gland to produce more T_3 & T_4 by either increasing or decreasing the release of a hormone called thyroid stimulating hormone. If any imbalance occurs in these hormones it can leads to thyroid disorders.[5]

A thyroid disease is a medical condition that affects the function of the thyroid gland. The symptoms of thyroid disease vary depending on the type. There are four general types; hypothyroidism, hyperthyroidism, structural abnormalities, most commonly an enlargement of the thyroid gland, and tumors which can be benign or cancerous.[6]

Thyroid diseases are occurring worldwide. In India too, there is a significant encumbrance of thyroid diseases.[7] According to estimate from various studies on thyroid disorders, it has been estimated that about 42 million people in India suffering from thyroid disorders. Uttarakhand state of India is a part of Himalayan Foothills, where thyroid diseases are common.[8]

METHODS

Non-Experimental Descriptive Research Design, was used to assess the knowledge regarding thyroid disorders among patients attending medical OPD. Data was collected at Himalayan Hospital Jolly grant, Doiwala, Dehradun Uttarakhand from June 2018 to July 2018.

The sample size was 100 patients who fulfilled the inclusion criteria i.e. patients who were willing to participate and present at the time of data collection. Sample who were not willing, had psychological problems and not present at the time of data collection were excluded from the study. Sample size was calculated based on previous literature and Non probability purposive sampling was used.

An written permission was obtained from the ethics committee of SRHU, Principal of Himalayan college of Nursing, SRHU and HOD of Medical OPD.

After that Data was collected by using Structured knowledge questionnaire and data analysis was done by using descriptive (frequency, percentage, mean, median, mode & SD) and Inferential (qi-square method).

RESULTS

Sociodemographic characteristics of the study participants

Table 1 showed that half of the participants were in age group of below 35years. Half (53%) of participants were female and 47% of participants were male. Out of 100, 99 % participants were having formal education. 24% of participants were working in government sector, 32% of the participants were working in private sector, 27% of participants were housewife and 13% are self-employed. 74% of participants were married and 26% of participants were unmarried. 64% of participants were non-vegetarian and 36% are vegetarian. 78% of participants had social habits and 22% were not had social habits. 91% participants had previous knowledge about thyroid disorders, 79% of participants had no history of suffered/suffering from thyroid disease. 83% of participants had no family history of thyroid disease and 67% of participants had no history of medicine intake.

Table 1: Socio demographic characteristics of the study participants (n=100).

Characteristics	Frequency (f)	Percentage (%)
Age (years)		
Below 35	50	50
At and above 35	50	50
Gender		
Male	47	47
Female	53	53
Education		
No formal	1	1
Primary education	11	11
Secondary education	18	18
Senior secondary	37	37
Graduation	33	33
Occupation		
Government	24	24

Continued.

Characteristics	Frequency (f)	Percentage (%)
Private	32	32
Housewife	27	27
Self employed	13	13
Marital status		
Married	74	74
Unmarried	26	26
Dietary pattern		
Vegetarian	36	36
Non vegetarian	64	64
Social habit		
Yes	22	22
No	78	78
Previous knowledge		
Yes	91	91
No	9	9
Suffered/suffering from thyroid D		
Yes	21	21
No	79	79
family history		
Yes	17	17
No	83	83
History of medicine		
Yes	37	37
No	67	67

Table 2: Mean, SD and mean percentage of knowledge of patients regarding thyroid disorders (n=100).

Variable	Range of score	Mean±SD	Median	Mean percentage (%)
Knowledge score	16	14.04±3.755	14	14.04%

Table 3: Association of knowledge scores with their selected variables.

Variables	Below median	At and above median	df	Chi-square value/fisher exact*	P value
Age (years)					
Below 35	23	27	1	0.001	0.9748
At & above35	22	28			
Gender					
Male	21	26	1	0.36	0.5485
Female	24	29			
Marital status					
Married	35	39	1	1.00	0.3173
Unmarried	10	16			
Dietary pattern					
Vegetarian	20	16	1	0.286	0.596
Non vegetarian	25	39			
Social habits					
Yes	12	10	1	31.26	0.0001
No	33	45			
Previous knowledge regarding thyroid disorders					
Yes	39	52	1	67.240**	0.001
No	6	3			
Suffered/suffering from thyroid disorder					
Yes	9	12	1	33.640	0.001
No	36	43			

Continued.

Variables	Below median	At and above median	df	Chi-square value/fisher exact*	P value
Family history of thyroid disorders					
Yes	8	9	1	43.560	0.0001
No	37	46			
Any medicine history					
Yes	16	17	1	11.560	0.0001
No	29	38			

Df_1=3.84 at the level of p<0.05.

Knowledge regarding thyroid disorders

Table 2 Showed that the range of score was 16. The mean and standard deviation of knowledge score was 14.04 and 3.755 mean percentage for the knowledge score was 14.04%.

Association of knowledge score regarding thyroid disorders with selected demographic variables

Significant association found between knowledge score and selected variables such as social habits, previous knowledge regarding thyroid disorders, suffered or suffering from thyroid disorders, family history of thyroid disorders and medical history of any medicine intake.

DISCUSSION

The study evaluated the knowledge of patients regarding thyroid disorders. The range of score was 18, median was 14, mean value was 14.04, standard deviation was 3.755 and the total mean percentage was 14.04%. The findings of the study revealed that 42% of participants had good knowledge, 38% had average knowledge, 7% of participants had poor knowledge and 13% of participants had very good knowledge about thyroid disorders. The study outcome was supported by the cross-sectional study conducted by Rai et al to assess the knowledge and awareness regarding thyroid disorders among women of a cosmopolitan city in central India. The study revealed that Out of 250 females, 29.3% did not heard the word thyroid and only 49.20% knew about hyperthyroidism and hypothyroidism.[9] The present study also supported by a cross-sectional study conducted by Sharma et al. Study was done to assess the knowledge and awareness regarding thyroid disorders among university students in Chandigarh. The study revealed that there was significant lacuna in the knowledge and awareness about the symptoms, factual statements, and fallacies associated with the thyroid disorder.[10]

The study findings revealed that there was significant association between knowledge score and selected variables such as social habits, previous knowledge regarding thyroid disorders, suffered or suffering from thyroid disorders, family history of thyroid disorders and medical history of any medicine intake. The study outcome was supported by the cross-sectional study conducted by Sharma et al which found Significant associations between gender and the previous levels of knowledge and awareness.[10]

This study also has several limitations, the sample size is relatively small and may not be representative of all hence, it is recommended to conduct further studies using larger sample size. And no interventions were being made in the study, only the knowledge of patients were assessed.

CONCLUSION

The present study concluded that 42% of participants had good knowledge, 38% had average knowledge, 7% of participants had poor knowledge and 13% of participants had very good knowledge about thyroid disorders. Despite the limitations, the study highlighted the need for creating awareness regarding thyroid disorders. Community awareness activities, preventive and educational programmes are needed to improve the knowledge level among people. The study concluded that there are still some areas that needs to be improved.

ACKNOWLEDGEMENTS

We would like to thank the participants of the study.

Funding: No funding sources
Conflict of interest: None declared
Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. COL Burch Henry B. Thyroid tests, 2017. Available at: http://www.endocrine.niddk.nih.gov/pubs/thyroidtests/. Accessed on 01 May 2024.
2. Unnikrishnan AG, Menon UV. Thyroid disorders in India: An epidemiological perspective. Ind J Endocrinol Metabol. 2011;15(Suppl2):S78-81.
3. Conrad SM. Thyroid Disorders, 2017. Available at: https://www.medicinenet.com/thyroid_disorders/article.htm. Accessed on 01 May 2024.
4. Wang C, Crapo LM. The epidemiology of thyroid disease and implications for screening. Endocrinol Metab Clin North Am. 1997;26(1):189-218.
5. Rai S, Sirohi S, Khatri AK, Dixit SD, Saroshe S. Assessment of knowledge and awareness regarding thyroid disorders among women of a cosmopolitan

city of central India. Nat J Commu Med. 2016;7(03):219-22.
6. Baskaram PMA, Prasanna B. Assess the knowledge and attitude; hypothyroidism among antenatal mothers with hypothyroidism." Bangalore, Karnatka, India. J. Bio. Innov. 2016;5(6):861-73.
7. Levie D. A study to assess the association of maternal thyroid function in early pregnancy with child neurodeveplopment. 2018.
8. Nasirkandy MP, Badfar G, Shohani M, Rahmati S, YektaKooshali MH, Abbasalizadeh S, et al. The relation of maternal hypothyroidism and hypothyroxinemia during pregnancy on preterm birth: An updated systematic review and meta-analysis. Int J Reproduct Biomedi. 2017;15(9):543.
9. Vergamini LB, Frazier AL, Abrantes FL, Ribeiro KB, Rodriguez-Galindo C. Increase in the incidence of differentiated thyroid carcinoma in children, adolescents, and young adults: a population-based study. J Pediatr. 2014;164(6):1481-5.
10. Sharma C, Rohilla R, Kumar M. A cross-sectional study to assess the knowledge and awareness regarding thyroid disorder among university students, Chandigarh, India. Int J Community Med Public Health. 2022;9(4):1804-9.

Cite this article as: Rana S, Sati R, Thapa T, Rana P, Joshi M, Praveen S, et al. Assess the knowledge regarding thyroid disorders among patients attending medical OPD. Int J Community Med Public Health 2024;11:4285-9.