

Effect Of Health Education on Thyroid Disorders Among Teachers Working in Secondary Schools of Vidarbha Region, Maharashtra.

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Abstract—Objectives:To assess the effect of health education on thyroid disorder among teachers working in secondary schools of Vidarbha region Maharashtra. **Methods:** A quantitative pre-experimental one-group pre-test and post-test design was adopted. A total of 329 Secondary school's teachers were selected using purposive sampling. by providing health education on thyroid disorder. Knowledge was assessed using the SAQ Post-tests were conducted on the 7th days. **Results:** Descriptive and inferential statistics were used for data analysis. The Result showed a clear health education on knowledge regarding thyroid disorders. The improvement in knowledge after the intervention. The mean pre-test score (17.30 ± 5.15) increased significantly to the post-test mean score (23.55 ± 3.63). The paired t-test revealed a highly significant difference ($t = 32.907$, $p < 0.001$), proving that the health education program was highly effective. No significant association was found between post-test knowledge and demographic variables such as age, gender, qualification, work experience, or source of information. The tool used in the study showed acceptable reliability (Cronbach's alpha = 0.711). Overall, the health education intervention significantly improved teachers' knowledge regarding thyroid disorders. **Conclusion** The study concludes that the health education intervention was highly effective in improving knowledge regarding thyroid disorders among teachers working in secondary schools. There was a statistically significant increase in post-test knowledge scores compared to pre-test scores.

Index Terms—Health education , Teachers , Knowledge , Thyroid disorders, Vidarbha region.

I. INTRODUCTION

Thyroid diseases are serious and even life threatening but usually curable, manageable and treatable. This disease is generally term for a medical condition that

keeps, thyroid from making the right number of hormones. Signs and symptoms of overt hyper- and hypothyroidism are well-known and usually recognised.1 it will focus on the epidemiology of common thyroid diseases in India they are hypothyroidism ,hyperthyroidism, goiter and iodine deficiency disorders, Hashimoto's thyroiditis, and thyroid cancer.2 The thyroid function disorders were more common (10.89%) in adolescents (14-19 years) than children (1-13 years) (7.82%) and in females (12.05%) than males(5.36%) in both age groups.3 Thyroid is a small, butterfly-shaped gland located at the front of neck under the skin. It's a part of endocrine system and controls many of body's important functions.4 Diseases of the thyroid gland are among the most abundant endocrine disorders worldwide, secondly to diabetes. Hyperfunction hyperthyroidism as well as hypofunction hypothyroidism cure in about 2% and 1%, respectively. The prevalence in men is about one tenth of that in women. Hyper and hypothyroidism may be due to diseases of the thyroid gland, secondary to malfunction of the pituitary gland, or, tertiary, to malfunction in hypothalamus.

II. OBJECTIVE

The objective of this study is :

1. To assess the effect of health education on thyroid disorder among teachers working in secondary schools of Vidarbha region Maharashtra.

III. METHODS

A quantitative approach was adopted, pre-experimental with one group pretest posttest designs and experimental research approach was used to assess

the effect of health education regarding thyroid disorders among teachers working in secondary schools of Vidarbha region, Maharashtra. However, purposive sampling technique was used. Inclusion criteria : teachers who shall give consent to participate in the study. Teachers available at the time of data collection. Exclusion criteria: Teachers those who are already attended any programme on thyroid disorders. Self-Administered Questionnaire (SAQ): This tool was constructed to assess the knowledge of teachers on health education before and after the intervention in experimental group. The tool demonstrated acceptable internal consistency reliability, with a Cronbach's alpha value of 0.713, indicating a satisfactory level of consistency among the 37 items.

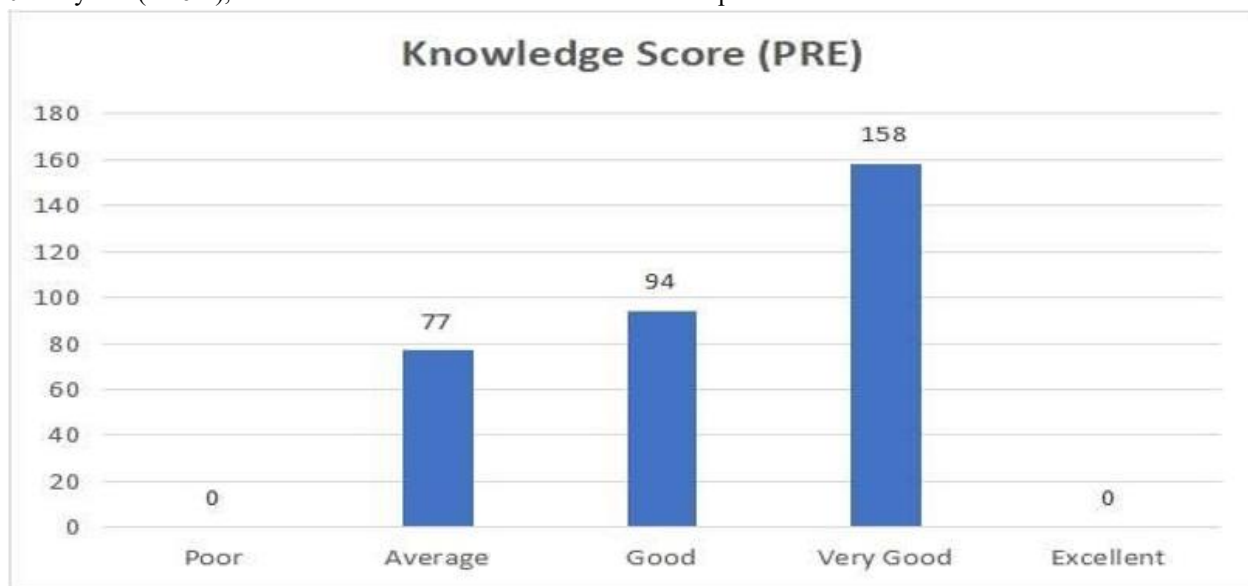
IV.RESULTS

Demography profile: Most participants were in the age group 41-50 years (42%),gender male (57.8%),Qualification B.Ed. (73.9), Work Experience 0 to 2 years (42.6%), Source of

information 173(52.6) Knowledge score: pre mean knowledge score s 17.30 ± 5.15 , the mean post-test score increased to 23.55 ± 3.63 .

Graphical representation: The table shows the distribution of pre-test knowledge scores among the participants (N = 329). None of the participants scored in the Poor category (0–6) or in the Excellent category (25–30), with 0 (0%) in both levels. A total of 77 participants (23.4%) had an Average level of knowledge with scores between 7 and 12, while 94 participants (28.6%) had a good level of knowledge with scores

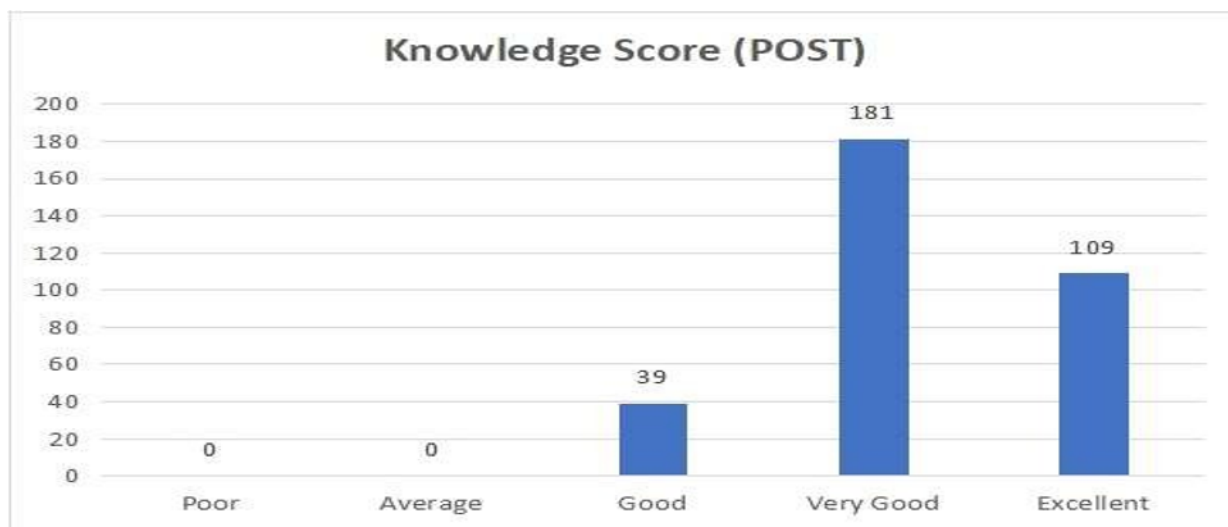
ranging from 13 to 18. The majority of participants, 158 (48.0%), had a Very Good level of knowledge with scores between 19 and 24. The minimum score obtained was 8 and the maximum score was 24. The overall mean pre-test knowledge score was 17.309 with a standard deviation of 5.15232, indicating that most participants had good to very good knowledge in the pre-test assessment.



Graph 8 Bar Diagram Showing Level of Pre-Test Knowledge Score among Participants(N=329).

The table presents the distribution of post-test knowledge scores among the participants (N = 329). None of the participants scored in the Poor (0–6) or Average (7–12) categories, with 0 (0%) in both levels. A total of 39 participants (11.9%) had a good level of knowledge with scores ranging from 13 to 18, while 181 participants (55.0%) had a Very Good level of knowledge with scores between 19 and 24.

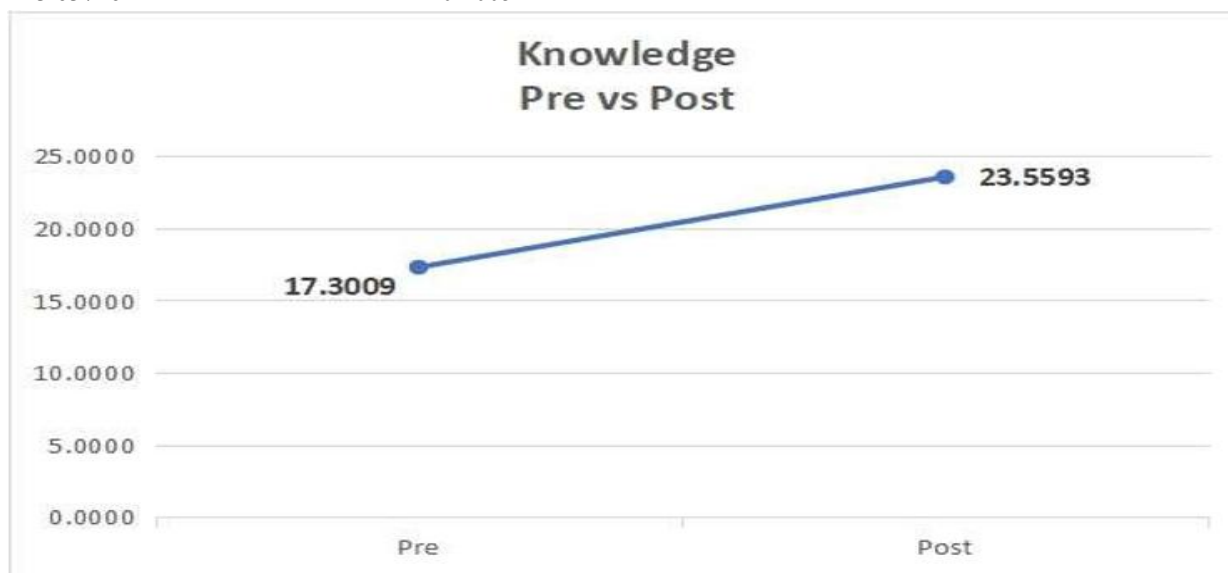
Additionally, 109 participants (33.1%) achieved an Excellent level of knowledge with scores ranging from 25 to 30. The minimum score obtained in the post-test was 16 and the maximum score was 30. The overall mean post-test knowledge score was 23.559 with a standard deviation of 3.6371, indicating a marked improvement in knowledge levels after the intervention.



Graph 9 Bar Diagram Showing Level of Post-Test Knowledge Score among Participants (N=329)

The table presents the comparison of pre-test and post-test knowledge scores among the participants (N = 329). The mean pre-test knowledge score was 17.3009 with a standard deviation of 5.15232 and a standard error mean of 0.28406. The mean post-test knowledge score increased to 23.5593 with a standard deviation of 3.63716 and a standard error mean of 0.20052. The

calculated t-value was -32.907 with 328 degrees of freedom. The p-value was less than 0.001, indicating a highly statistically significant difference between pre-test and post-test knowledge scores. This result shows that the intervention was highly effective in improving the knowledge of the participants.



Graph 10 Line Diagram Showing Mean Difference Between Pre-Test and Post-Test Knowledge Scores (N = 329)

V. DISSCUSSION

The present study was conducted to evaluate the effect of structured health education on knowledge regarding thyroid disorders among secondary school teachers in

the Vidarbha region, Maharashtra. The discussion is based on the major findings of the study and compared with similar related research. In the present study, the mean pre-test knowledge score was 17.30 ± 5.15 , indicating a moderate level of baseline knowledge

among teachers. Although 48.0% of participants were

VI. CONCLUSION

categorized under the “Very Good” level, none achieved the “Excellent” category. This finding suggests that teachers possessed some awareness regarding thyroid disorders but lacked comprehensive knowledge, particularly related to causes, risk factors, early signs, and preventive measures. Similar findings were reported by Sharma et al. (2018) and Patil and Kulkarni (2019), who observed moderate baseline awareness among teachers before educational intervention, highlighting gaps in detailed understanding of endocrine disorders.

The present study was conducted to evaluate the effect of health education on knowledge regarding thyroid disorders among teachers working in secondary schools of the Vidarbha region, Maharashtra. A total of 329 teachers participated in the main study. The findings of the study clearly demonstrate that structured health education is an effective intervention for improving knowledge regarding thyroid disorders. In conclusion, the structured health education program proved to be highly effective in improving knowledge regarding thyroid disorders among secondary school teachers. Incorporating regular health education sessions into school health programs can significantly contribute to early detection, prevention, and better management of thyroid-related conditions in the community. The study supports the integration of systematic health awareness initiatives within educational institutions to strengthen preventive healthcare practices and promote overall endocrine health awareness.

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