Impact Assessment Report 2023-24

Thyroid Homoeopathy Specialty Clinic

National AYUSH Mission Kerala

Contents

1. Executive Summary

The Thyroid Homoeopathy Speciality Clinic in Kerala, established by the National AYUSH Mission, has shown significant success since its inception. Originally launched as a pilot project in Idukki district in 2012, it was expanded statewide to 14 districts by 2018-2019. The program aimed to provide early diagnosis, reduce comorbidities, lower infertility rates due to thyroid issues, and decrease out-of-pocket expenses for patients.

The study aimed to evaluate the impact of the Thyroid Homoeopathy Speciality Clinics on healthcare across Kerala and to assess the health status of beneficiaries. Conducted in two phases, the study employed a quantitative methodology. Phase 1 involved collecting data on the number of beneficiaries and outreach activities from all 14 clinics over two years. Phase 2 focused on gathering detailed health data from a sample of 437 beneficiaries across five selected districts: Kollam, Kozhikode, Thiruvananthapuram, Thrissur, and Wayanad.

The project saw substantial growth in patient engagement, with beneficiaries increasing from 31,645 in 2022-23 to 38,086 in 2023-24. Outreach activities also expanded significantly, with the number of beneficiaries rising from 4,739 to 6,813 over the same period. Demographic analysis revealed that the majority of the beneficiaries (86.7%) were female, with most aged between 21-60 years (82.6%). A large proportion (73.2%) belonged to the Above Poverty Line (APL) category. Health outcomes were notably positive, with 77.6% of beneficiaries reporting improvements in their conditions post-treatment. There was a significant reduction in mean TSH levels, indicating effective management of thyroid dysfunctions. Additionally, approximately 33.5% of patients previously on allopathic medications were able to discontinue them after receiving homoeopathic treatment.

Based on the findings, several recommendations were made to enhance the program's effectiveness. These include conducting regular impact assessments using systematic and expert-validated tools, utilizing standardized tools to measure quality of life improvements in patients, and tracking treatment duration to better understand the efficacy and impact of homoeopathic treatments over time.

Overall, the Thyroid Homoeopathy Speciality Clinic project has demonstrated significant success in improving thyroid health outcomes across Kerala. The positive findings underscore the effectiveness of homoeopathic treatments in managing thyroid dysfunctions and highlight the need for continued expansion and enhancement of the program to sustain and further these benefits.

2. Introduction

Thyroid diseases are common in India, as it is in the rest of the world. It has been estimated that about 42 million people in India suffer from thyroid disease and hypothyroidism is the most common endocrine disorder. The prevalence and pattern of thyroid disorders depend on sex, age, ethnic and geographical factors and especially food habits and iodine intake. Iodine deficiency and excessive iodine intake can cause thyroid dysfunction like goitre, hypothyroidism and autoimmune thyroiditis.

The Thyroid Homoeopathy Speciality Clinic was established in the Idukki district of Kerala in 2012 by the Department of Homoeopathy. Idukki district was selected as the pilot location for the project due to its endemicity of goitre. Due to the continuous demand from the public and observations in the assessment of clinical outcomes, the Department of Homoeopathy has sought assistance through the National AYUSH Mission for providing additional Human Resources, equipment, funds for medicine, and other consumables. After considering the matter NAM has proposed the project in SAAP 2018 – 19 and received approval for implementation. Since November 2018 the project has been operational as an exclusive NAM project at District Homeo Hospital Idukki. Analyzing the data obtained from Idukki, the Department of Homoeopathy has submitted a proposal to scale up the projects in 14 districts for inclusion in SAAP 2019-20. The proposal was included in SAAP and received approval for implementation. The project is now running in all 14 districts of Kerala.

The Thyroid Homoeopathy Specialty Clinic project was implemented statewide with the objectives of,

- Early diagnosis and treatment of thyroid disease
- To reduce comorbidities related to thyroid disease
- To reduce thyroid-related infertility rates
- To reduce out-of-pocket expenditure for the treatment of lifestyle diseases

A periodic and timely review and monitoring will strengthen the project by identifying the gaps. Conducting an impact assessment will take the role of internal monitoring of the program and its implementation and help in identifying potential threats. This impact assessment report evaluates the effectiveness of the project in providing essential, affordable, and equitable healthcare services to people irrespective of age, gender, or ethnicity. The report also evaluates the coverage of the project and determines the extent to which the project's objectives are achieved.

3. Objectives of the Study

1. To evaluate the impact of Thyroid Homoeopathy Specialty Clinic services on healthcare across the state.
2. To evaluate the impact of Thyroid Homoeopathy Specialty Clinics by assessing the health status of beneficiaries.

4. Methodology

Quantitative methodology was followed to meet all the objectives of the study. There are a total of 14 Thyroid Homoeopathy Specialty Clinics running in the state of Kerala, one in each district. The impact assessment study was done in two phases, phase 1 and phase 2. Phase 1 was carried out to meet the first objective of our study. In this phase data on the number of beneficiaries and the number of outreach activities conducted in all 14 units during the past two financial years was collected with the help of project coordinators of the respective districts.

The other objectives were fulfilled in the second phase of this study, where the data was collected from randomly selected five units in the state. The selected units for the impact assessment were Kollam, Kozhikode, Thiruvananthapuram, Thrissur, and Wayand. Based on the total number of beneficiaries availed Thyroid Homoeopathy Specialty Clinic services from these five units, a sample size of 437 was estimated. The sample size for each unit was calculated proportionally and samples estimated for Kollam, Kozhikode, Thiruvananthapuram, Thrissur, and Wayanad units were 95, 41, 42, 211, and 48 respectively. Data from each unit were collected using a Google form filled by the medical officers of respective districts by randomly selecting the case records. The collected data were then cleaned and analysed using Microsoft Excel.

5. Findings

5.1. Phase 1

5.1.1. Coverage and Utilisation of Thyroid Homoeopathy Specialty Clinic Services

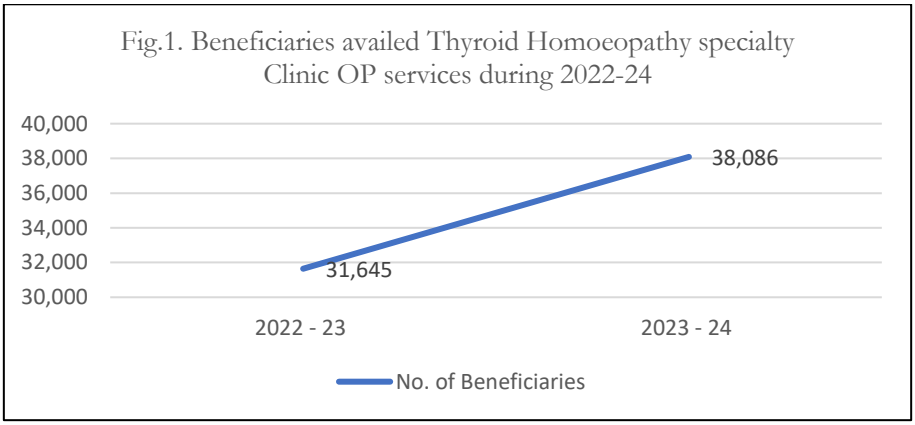
Initially, the Thyroid Homoeopathy Specialty Clinic was started in the Idukki district as a pilot project due to the endemicity of goitre. The data obtained from the pilot project showed the requirement of the project in other districts and due to simultaneously increased demand from other districts the project scaled up to all other districts. Now the specialty clinic is functioning in all districts. There is an increase in patients seeking services over two years rising from 31,645 during 2022-23 to 38,086 during 2023-24 (Table 1 and Figure 1). The number of outreach activities conducted increased over the year, and the number of beneficiaries also increased from 4,739 to 6813 (Table 2 and Figure 2).

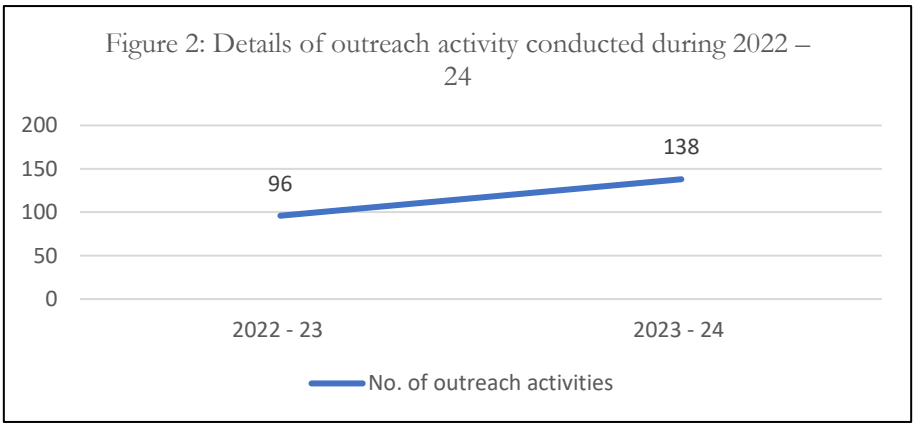
Table 1: Total beneficiaries availed Thyroid Homoeopathy specialty Clinic OP services during 2022-24

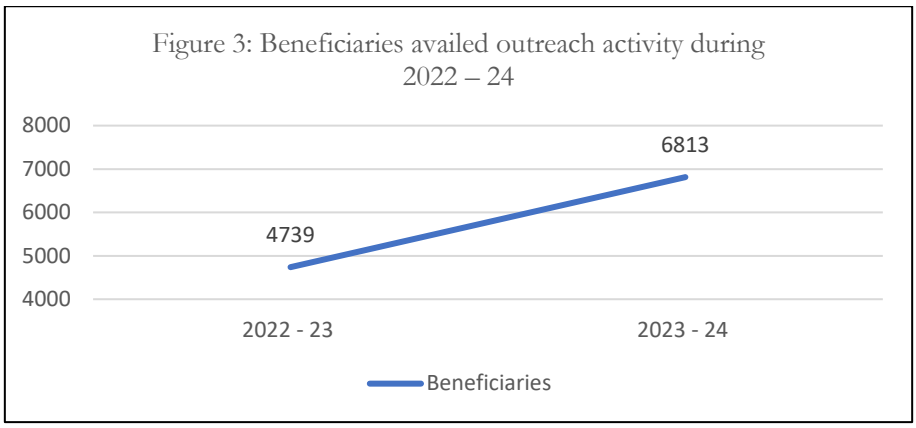
Year	No. of Beneficiaries
2022 – 23	31,645
2023 – 24	38,086

Table 2: Outreach activities conducted in the Thyroid special clinic project during 2022 – 24

Year	No. of outreach activities	No. of beneficiaries
2022 – 23	96	4739
2023 – 24	138	6813







5.2. Phase 2

5.2.1. Sociodemographic Characteristics

The sociodemographic characters of the samples are summarized in Table 3, nearly half (48.3%) of the samples were from the Thrissur unit. Among the participants, 42.6% were in the age group of 41 – 60 years, were more than three-fourths (82.6%) of the participants were in the age group of 21 – 60 years. The data revealed that more than one-fourth (86.7%) of the beneficiaries were females, and nearly three-fourths (73.2%) of the beneficiaries belonged to APL. (Table 3)

Table 3: Socio-demographic characteristics of the beneficiaries

Characteristics	Number	Percentage
District		
Kollam	95	21.7
Kozhikode	41	9.4
Wayanad	48	11
Thrissur	211	48.3
Thiruvananthapuram	42	9.6
Age group		
1 – 20 years	33	7.6
21 – 40 years	175	40.0
41 – 60 years	186	42.6
61 – 80 years	80	9.8
Gender		
Male	58	13.3
Female	379	86.7
Socio-economic class		
APL	320	73.2
BPL	117	26.8

5.2.2. Radiation exposure and Goitrogen exposure among beneficiaries

Among the samples only 1.4% (n=6) were exposed to radiation, among the samples who were exposed to radiation 5 were females. Nearly half (38.9%) of the beneficiaries were consuming goitrogens, among them more than three-fourths (83.5%) were females. (Figure 4, 5)

Figure 4: Radiation exposure status of beneficiaries

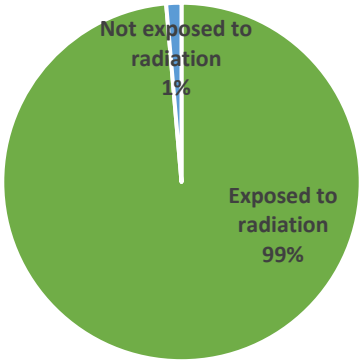
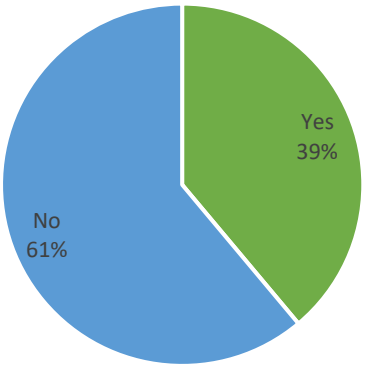


Fig. 5. Intake of goitrogens



5.2.3. Salt intake status of beneficiaries

Among the beneficiaries, more than half (69.8%) had a salt intake of >5 g/day, among them 94.8% were consuming iodised salt. Of the beneficiaries whose salt intake was <5 g/day, 93.9% were consuming iodised salt. (Table 4)

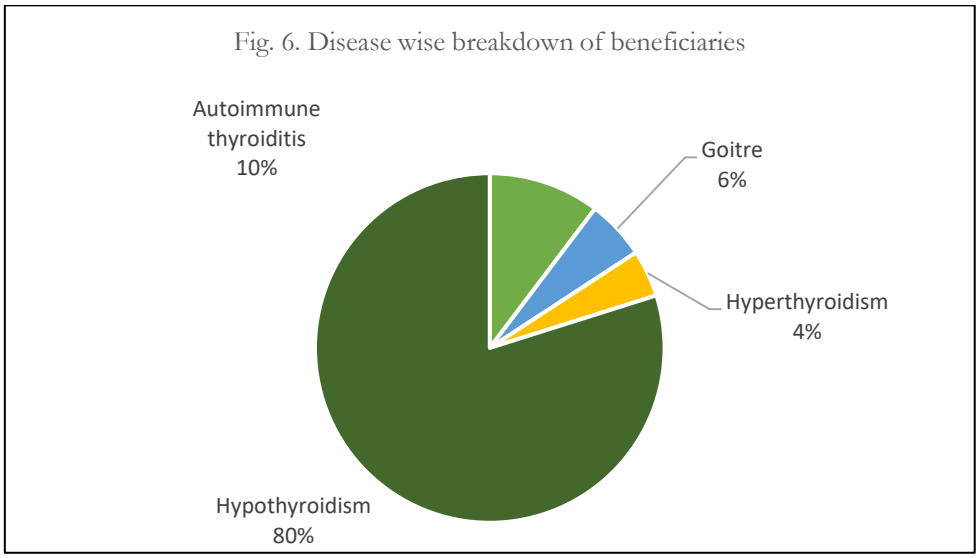
Table 4: Salt intake status of beneficiaries

Daily salt intake	Type of salt	Number (%)
<5 g/day	Iodised salt	124 (93.9)
	Iodised salt, Rock Salt	3 (2.3)
	Rock salt	5 (3.8)
>5 g/day	Iodised salt	289 (94.8)
	Iodised salt, non-iodised salt	10 (3.3)
	Iodised salt, Rock salt	2 (0.7)
	Non-iodised salt	1 (0.3)
	Rock salt	3 (1.0)

5.2.4. Disease-wise breakdown of beneficiaries

The beneficiaries who availed the services from the thyroid special clinic, among them more than three-fourth (79.9%) were provisionally diagnosed as hypothyroidism (Figure 6). Among the 24 cases of goitre, there were 12 cases of multinodular goitre and one case of solitary nodule. Among the hypothyroidism cases, there were 52 male beneficiaries, which was 89.7% of the total male beneficiaries. Of beneficiaries who availed service for hypothyroidism among them 42.4% were in the age group of 41 – 60 years, whereas 81.1% of total beneficiaries were within the range of 21 – 60 years of age. Among the beneficiaries who were diagnosed with hyperthyroidism, 47.4% were in the age group of 21 – 40 years.

Fig. 6. Disease wise breakdown of beneficiaries

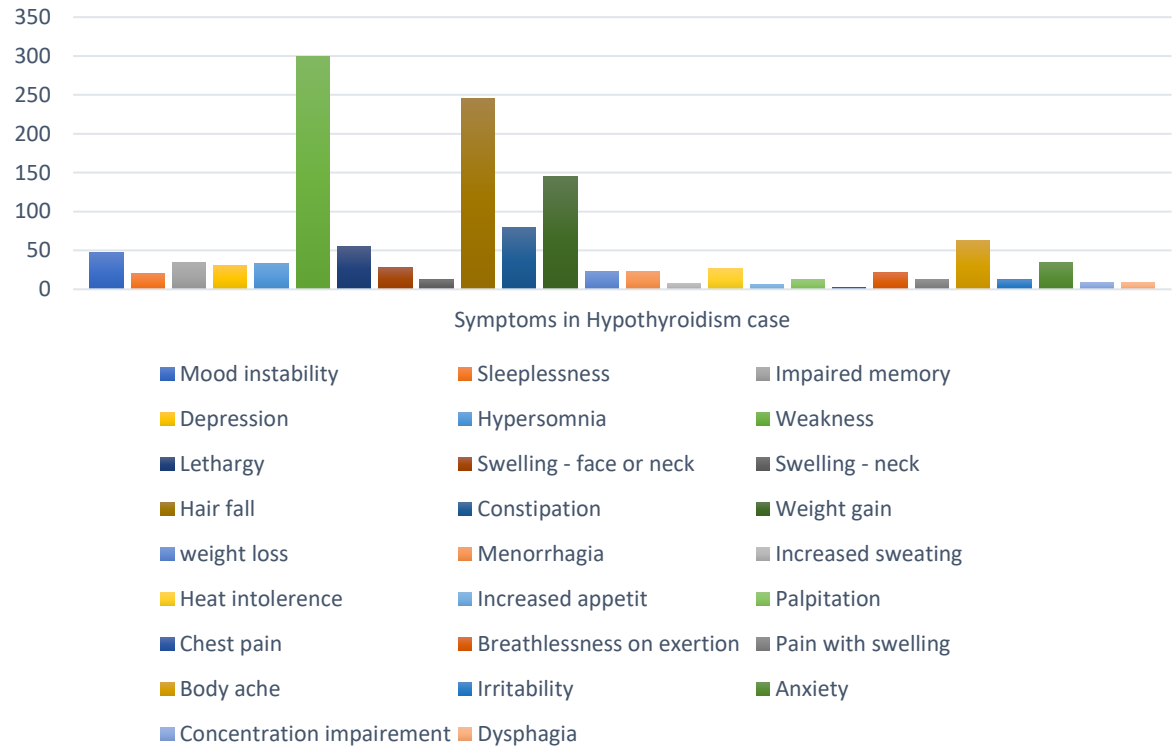


5.2.5. Disease-wise presenting complaint

Figure 7 – 10 represents the presenting complaints of the beneficiaries, disease wise presenting complaints are given in different graphs. Presenting complaints or symptoms of hypothyroidism, hyperthyroidism, goitre, and autoimmune thyroiditis are represented in Figure 7, Figure 8, Figure 9, and Figure 10 respectively. Among the 437 beneficiaries, only 24 reported only one presenting complaint rest all came with multiple complaints.

Among the beneficiaries diagnosed with hypothyroidism, most of them reported weakness as one of their major presenting complaints, followed by hair fall and weight gain. (Figure 7)

Figure 7: Presenting complaints of the beneficiaries diagnosed with hypothyroidism



Among the beneficiaries diagnosed with Hyperthyroidism, most of them reported increased sweating as one of their major presenting complaints, followed by weakness, weight loss, and breathlessness on exertion. (Figure 8)

Figure 8: Presenting complaints of the beneficiaries diagnosed with hyperthyroidism

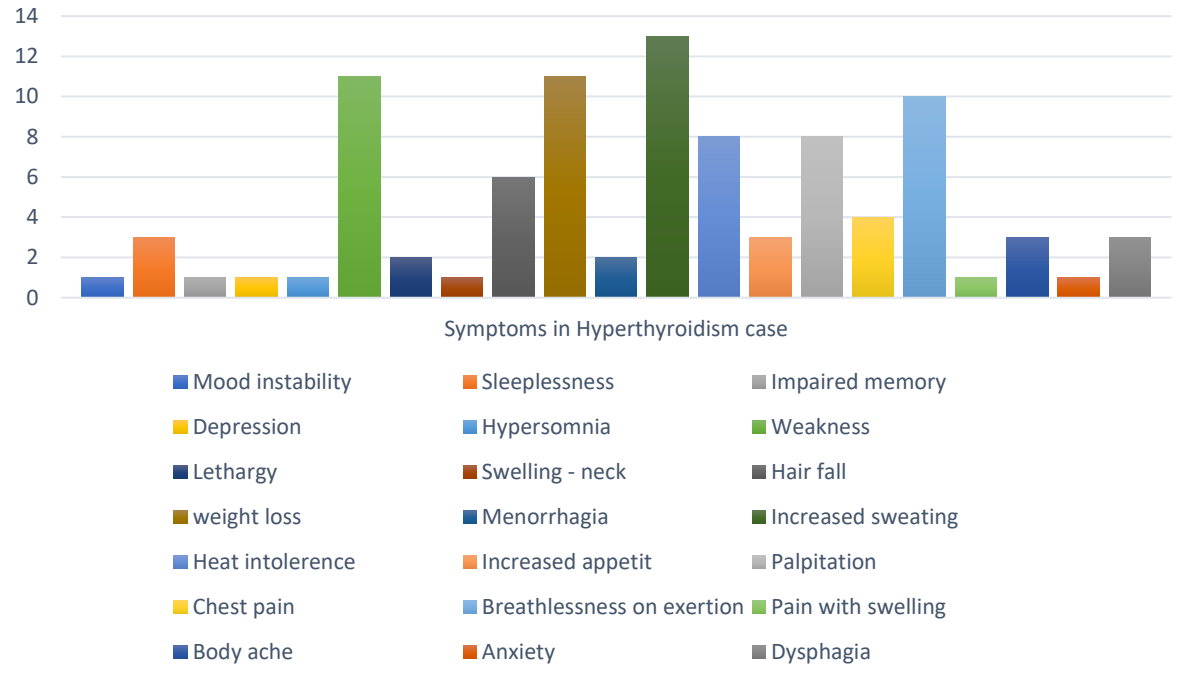
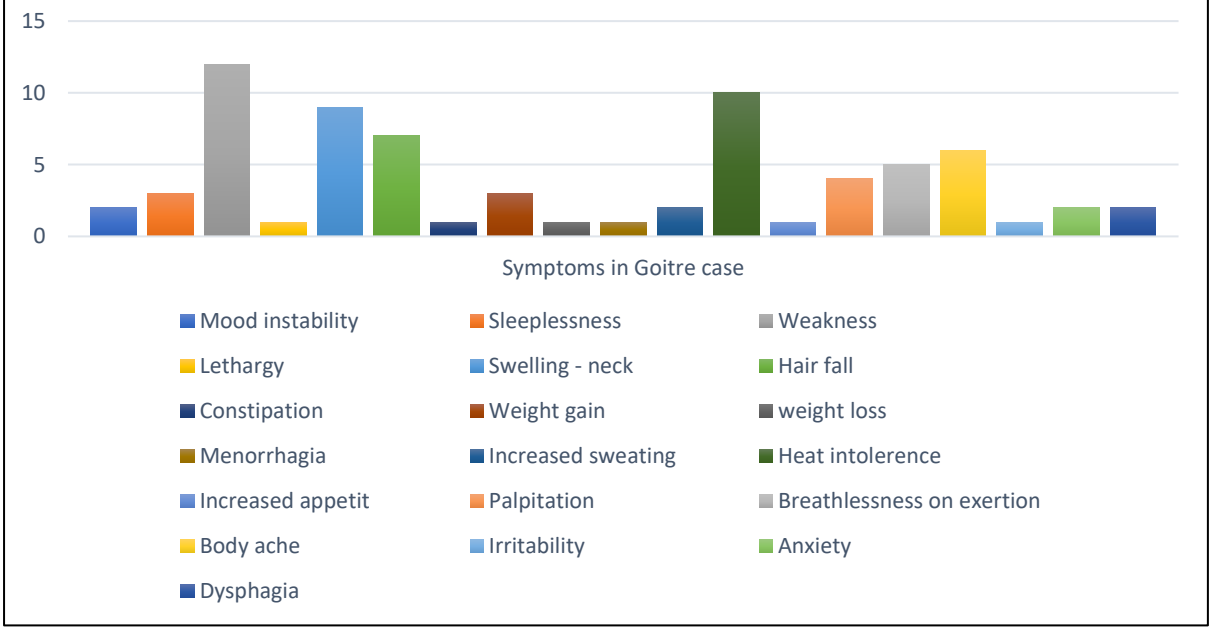
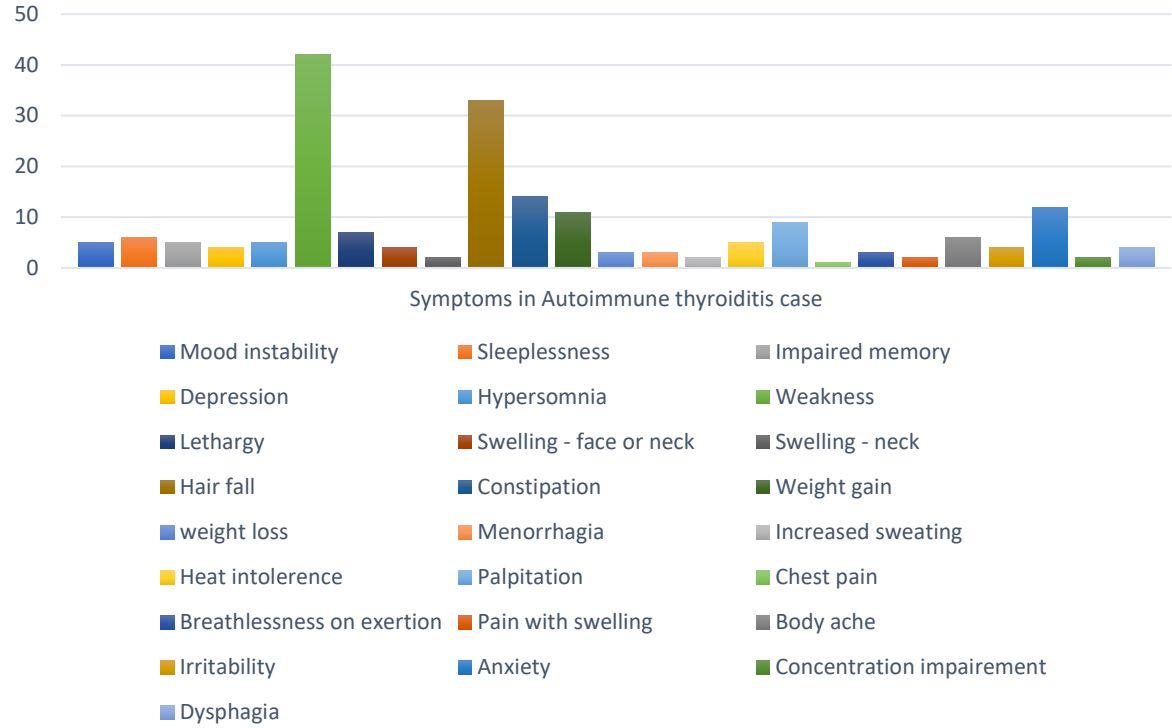


Figure 9: Presenting complaints of beneficiaries diagnosed with Goiter



Among the beneficiaries diagnosed with goitre and autoimmune thyroiditis, most of them reported weakness (Figure 9 and Figure 10)

Figure 10: Presenting complaints of beneficiaries diagnosed with autoimmune thyroiditis



5.2.6. Previous treatment history for thyroid dysfunction

Table 5 represents the treatment history of beneficiaries who availed services from the Thyroid special clinic, among them nearly three-fourth (71.9%) took treatment from either of the three systems of medicines. Among the beneficiaries with treatment history, the majority (90.5%) took treatment from the allopathic system of medicine. Even though, most of the beneficiaries (60% – 70%) were under treatment before, 70% of the beneficiaries who availed services for the goitre were not under any treatment or diagnosed from our clinic.

Table 5: Previous treatment history of beneficiaries

Previous treatment status	System of medicine	Number	Percentage
Yes, Took previous treatment for their thyroid dysfunction	Modern Medicine	284	65.0
	Ayurveda	4	0.9
	Homoeopathy	26	5.9
No, the beneficiaries didn't avail of any treatment prior		123	28.1

5.2.7. Details of beneficiaries taking modern medicine

Table 6 represents the previous allopathic medicine consumed by the beneficiaries before and after homoeopathic treatment. Among the beneficiaries who took previously allopathic medicine 33.5% (n=95) stopped consuming the allopathic medication after the treatment. Of the beneficiaries who could stop their allopathic medication after treatment, the majority (78.9%) improved in their symptoms and 15.8% discontinued the treatment; furthermore, nearly half (44.2%) of them were in the age group of 21 – 40 years.

Among the beneficiaries who could stop their allopathic medication, 24.2% were consuming Thyronorm 50mcg before, whereas 22.1%, 13.7%, and 16.8% were consuming Thyronorm 25mcg, 75mcg, and 100mcg respectively.

Table 6: Table representing the medicine dosage before and after treatment

Medicine consumed with dose before treatment	Number (%)	Medicine consumed with dose after treatment	Number (%)
Thyronorm 10	1 (0.4)	Stopped	1 (100)
Thyronorm 12.5	7 (2.5)	Thyronorm 12.5	1 (14.3)
		Stopped	6 (85.7)
Thyronorm 25	53 (18.7)	Thyronorm 50	1 (1.9)
		Thyronorm 25	12 (22.6)
		Thyronorm 12.5	18 (33.9)
		Thyronorm 1.52	1 (1.9)
		Stopped	21 (39.6)
Thyronorm 37.5	4 (1.4)	Thyronorm 37.5	1 (25)
		Thyronorm 25	1 (25)
		Thyronorm 12.5	1 (25)
		Stopped	1 (25)
Thyronorm 50	67 (23.6)	Thyronorm 50	11 (16.4)
		Thyronorm 37.5	2 (2.98)
		Thyronorm 25	21 (31.3)
		Thyronorm 12.5	10 (14.9)
		Stopped	23 (34.3)
Thyronorm 62.5	7 (2.5)	Thyronorm 50	6 (85.7)
		Stopped	1 (14.3)
Thyronorm 75	51 (17.9)	Thyronorm 100	1 (1.96)

		Thyronorm 75	5 (9.8)
		Thyronorm 62.5	1 (1.96)
		Thyronorm 50	20 (39.2)
		Thyronorm 37.5	1 (1.96)
		Thyronorm 25	7 (13.7)
		Thyronorm 12.5	3 (5.9)
		Stopped	13 (25.5)
Thyronorm 87.5	1 (0.4)	Thyronorm 75	1 (100)
Thyronorm 88	1 (0.4)	Thyronorm 88	1 (100)
Thyronorm 100	56 (19.8)	Thyronorm 100	9 (16.1)
		Thyronorm 75	11 (19.6)
		Thyronorm 50	12 (21.4)
		Thyronorm 25	8 (14.3)
		Stopped	16 (28.6)
Thyronorm 125	13 (4.6)	Thyronorm 125	1 (7.7)
		Thyronorm 75	2 (15.4)
		Thyronorm 50	1 (7.7)
		Stopped	3 (23.1)
Thyrnorm 150	12 (4.2)	Thyrnorm 150	1 (8.3)
		Thyrnorm 125	2 (16.7)
		Thyrnorm 100	2 (16.7)
		Thyrnorm 75	1 (8.3)
		Thyrnorm 50	1 (8.3)
		Stopped	5 (41.7)
Eltroxine 100	1 (0.4)	Stopped	1 (100)
Eltroxine 50	1 (0.4)	Eltroxine 25	1 (100)
Euthyrox 5	1 (0.4)	Euthyrox 25	1 (100)
Methimez 5	1 (0.4)	Methimez 2.5	1 (100)
Neomercazol 5	1 (0.4)	Stopped	1 (100)
Neomercazol 10	4 (1.4)	Neomercazol 5	1 (25)
		Stopped	3 (75)
Neomercazol 20	2 (.7)	Neomercazol 5	1 (50)
		Neomercazol 2.5	1 (50)

5.2.8. Status on improvement

Figure 11 represents the treatment outcome of the beneficiaries, among the beneficiaries who availed services from the thyroid special clinic more than three-fourths (77.6%) reported improvement in their complaints. Among the beneficiaries, 59 (13.9%) discontinued treatment and 39 (9%) reported no change or no improvement in their symptoms. Among the beneficiaries who were diagnosed with Hyperthyroidism all (100%) were improved, whereas improvement status for hypothyroidism, autoimmune thyroiditis, and goitre were 78.5%, 77.8%, and 45.8% respectively.

Fig. 11. Treatment outcome of beneficiaries

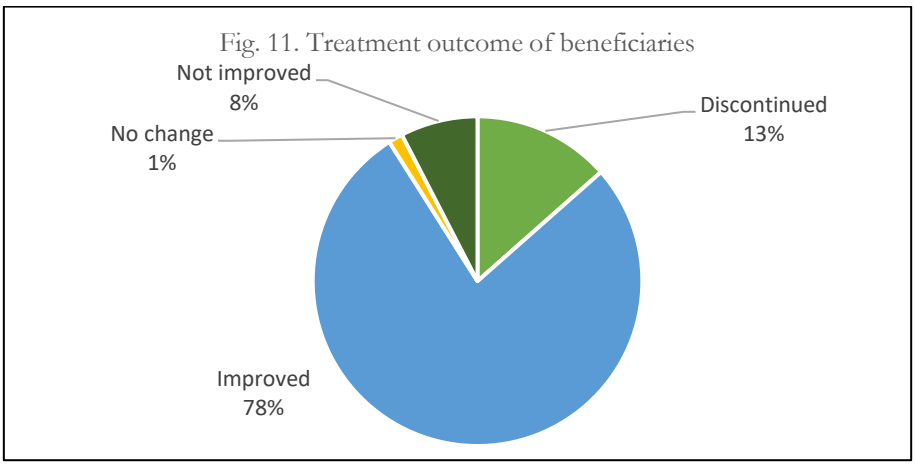


Table 7 depicts the treatment status of the beneficiaries based on their treatment history, among the beneficiaries who took allopathic medication 77.8% improved their health conditions.

Table 7: Treatment outcome of beneficiaries based on their previous treatment history

Previous treatment	Improved	Not improved	Discontinued
Modern Medicine	221 (77.8)	25 (8.8)	38 (13.4)
Ayurveda	2 (50)	0	2 (50)
Homoeopathy	23 (88.5)	2 (7.7)	1 (3.8)
Not underwent any treatment	93 (75.6)	12 (9.8)	18 (14.6)

5.2.9. Mean TSH value before and after treatment

Provisional Diagnosis	Mean TSH value before treatment (Mean ± SD)	Mean TSH value after treatment (Mean ± SD)
Autoimmune thyroiditis	13.49 ± 22.32	6.31 ± 10.7
Goiter	4.3 ± 5.4	3.7 ± 3.3
Hyperthyroidism	1.19 ± 2.5	2.23 ± 1.74
Hypothyroidism	9.45 ± 10.4	4.5 ± 4.84

6. Impact Analysis Summary

This impact study could identify that the number of beneficiaries availing the services from the Thyroid Special Clinic increases as the year passes. The community-level activities or outreach activities conducted under the project also accelerate the patient flow to the speciality clinic. This increases points towards the need of the public for quality Homoeopathic services at the peripheral level. Furthermore, the study could reveal that 34% of beneficiaries consider the homoeopathic system of medicine as primary for their ailments.

The study could identify the effect of the homoeopathic treatment on thyroid dysfunctions, where 78% reported an improvement in their symptoms. The mean TSH value before and after treatment also suggests that homoeopathic medicines have a significant impact on the treatment of Thyroid dysfunctions. Moreover, the study revealed that 33.5% of the beneficiaries who were under allopathic medication could stop their medicine completely after the treatment from homoeopathy.

7. Conclusion

The impact assessment of the Thyroid Homoeopathy Specialty Clinic project in Kerala demonstrates its effectiveness in addressing thyroid disorders through homoeopathic treatments. The project has successfully increased the number of beneficiaries and outreach activities, highlighting a growing public demand for these services. Clinical outcomes indicate significant symptom improvement and reduced reliance on allopathic medications, with a notable number of patients discontinuing conventional treatments after homoeopathic intervention. This suggests that homoeopathy can serve as a viable and cost-effective alternative for managing thyroid conditions. The project's success in providing accessible and affordable healthcare underscores the importance of continued support and expansion to ensure equitable health services across the state. Regular monitoring and evaluation are essential to sustain and enhance the project's impact, ultimately contributing to better health outcomes for the population.