



STUDY OF AWARENESS, PRACTICES AND COMPLIANCE TO TREATMENT OF PREGNANT WOMEN WITH HYPOTHYROIDISM

General Medicine

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ABSTRACT

Thyroid disorders are one of the most common and neglected chronic health condition in India. Hypothyroidism is decreased production of thyroid hormone, when there is deficient production by thyroid gland it is called primary and secondary is due to hypothalamic or pituitary disease. The prevalence of overt hypothyroidism has been reported as 3.5% to 4.2%⁽¹⁾. In our country there is lack of data of pregnant women with hypothyroidism on awareness, compliance to treatment and practices. This study is to assess the awareness about the disease in pregnant women and compliance to treatment with selected demographic variables. It is an quantitative, non-experimental descriptive study using simple random sampling. A total of 100 pregnant women were selected and awareness and compliance to treatment was assessed by awareness questionnaire and compliance scale. Collected data were analysed using inferential statistical methods. Among 100 pregnant women 42 % had inadequate awareness and 24% had adequate awareness. There is significant association found with type of family, occupation, educational status and food habits at $p < 0.05$ and no association with regarding to demographic variables. So if detected early with timely intervention and proper education to pregnant women we can significantly reduce maternal, fetal outcome and the study could help the practitioners to strategize future activity.

KEYWORDS

Pregnant women, hypothyroidism, compliance.

INTRODUCTION:

Hypothyroidism is more common in India. Hypothyroidism is widely prevalent in pregnant women. The rate of detection, risk factors accelerating hypothyroidism in pregnancy according to Williams obstetrics and Gynaecology has not kept pace with the magnitude of the problem. Thyroid problems usually get worse during pregnancy and after delivery. It has adverse effect on pregnancy outcome. A study done by Mahboobeh Momtazan et al⁽²⁾ of 600 pregnant women showed family history of thyroid disease is important risk factor for hypothyroidism in pregnancy. A retrospective study done by Masano Ohashi et al⁽³⁾ in Japan, demonstrated that the prevalence of thyroid dysfunction is increased in pregnant women with obstetrical and medical complications. A study done by Carmen M Tudela et al⁽⁴⁾ proved increase risk of developing gestational diabetes with increased thyrotropin level. P.M.Arulmozhi et al⁽⁵⁾ showed majority of antenatal mothers with hypothyroidism had inadequate awareness regarding disease and its effects.

MATERIALS AND METHODS:

OBJECTIVE OF THE STUDY;

To study the awareness, compliance to treatment and practices of pregnant women with hypothyroidism.

Hypotheses:

All hypotheses were tested at 0.05 level of significance H1: There will be a significant correlation between awareness and compliance to treatment regarding maternal hypothyroidism among antenatal mothers with hypothyroidism H2: There will be a significant association between awareness of antenatal mother with hypothyroidism towards maternal hypothyroidism and selected demographic variables.

Research approach: Quantitative approach.

Research design: Non Experimental Descriptive plan for the study.

Variables: Awareness, Compliance to treatment.

Setting: Father Muller Medical College, Mangalore.

Population: The is collected from all pregnant women attending OPD and admitted at Father Muller Medical College Hospital who are diagnosed with hypothyroidism and on treatment for hypothyroidism for more than 3 months.

Sample size: 100 Antenatal mothers with hypothyroidism.

Sampling Technique: Simple random sampling technique

The patients fulfilling the 'INCLUSION' and 'EXCLUSION' criteria will be included in the study using the purposive sampling technique.

Inclusion Criteria: Antenatal mothers who are:

- Willing to participate in the study.
- Registered and attending the antenatal OPD for visits.
- Both primi and multi-gravida women and on treatment for hypothyroidism for more than 3 months.
- Antenatal mothers who are available during data collection.

Exclusion Criteria:

- Health professional mothers
- Who are not willing to participate in the study.

The sample size has been calculated using the following formula

$$n = \frac{[Z_{\alpha}^2 * p(1 - p)]}{e^2}$$

Where n = sample size = 100

$Z_{\alpha}^2 = 1.96$ at 95% confidence interval

P = (suppose 2 %, $p = 0.02$)

e = Allowable error = 5% = 0.05

Data analysis:

A structured questionnaire is used to collect information on demographic aspects, risk factors accelerating hypothyroidism in pregnancy (based on William's obstetrics and Gynaecology) to check subject awareness and compliance to treatments with respect to hypothyroidism. The questionnaire include name, age, place of residence, education, duration of pregnancy, previous pregnancies, abortion, smoking, family history, occupation, type of diabetes, allergy, radiotherapy, lithium and OCP consumption, duration of treatment, baseline TSH, RBS, patients awareness about the disease, monitoring during treatment, diet, common beliefs, misconceptions and adherence to treatment.

Statistical Analysis:

All the statistical data will be analysed by organizing the data in a master sheet in Microsoft excel, statistical package for social sciences and frequency, percentage and ratios for demographic variables will be analysed from the data, chi-square test will be used to assess the statistical significance of the findings.

Ethical consideration:

The study was conducted after getting approval for concerned institution.

RESULT AND DISCUSSION:

Section-I: Frequency and percentage distribution of socio demographic variables of antenatal mothers with hypothyroidism. **Section-II:** Frequency and percentage distribution of level of awareness of antenatal mothers with hypothyroidism regarding hypothyroidism during pregnancy:

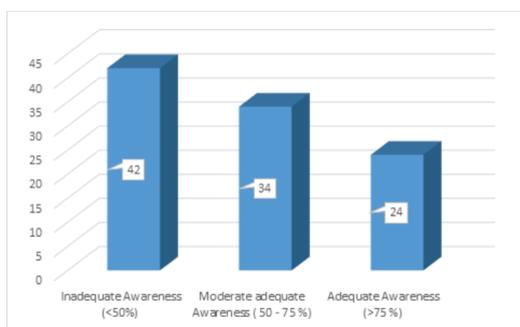
Table 1: Association between the level of awareness and their selected socio demographic variables of antenatal mothers with hypothyroidism:

Sl.no	Sample characteristic	Frequency	Percentage	Level of awareness				Chi square value
				≤ Median (35)		≤ Median (25)		
				No	%	No	%	
1. Age (in years):								
a.	20-25	12	12.00	8	66.67	4	33.33	2.15 df 3 N.S
b.	26-30	24	24.00	20	83.33	4	16.67	
c.	31-35	30	30.00	20	66.67	10	33.33	
d.	36 and above	34	34.00	25	73.53	9	26.47	
2. Type of family:								
a.	Nuclear family	68	68.00	22	32.35	46	67.65	8.11 df 1 S
b.	Joint family	32	32.00	20	62.50	12	37.50	
3. Occupation:								
a.	House wife	30	30.00	10	33.33	20	66.67	17.37 df 2 S
b.	Private employee	50	50.00	40	80.00	10	20.00	
c.	Government employee	20	20.00	12	60.00	8	40.00	
4. Educational stature								
a.	Primary school	30	30.00	25	83.33	5	16.67	6.978 df 2 S
b.	High school and above	52	52.00	40	76.92	12	23.08	
c.	Graduation and above	18	18.00	9	50.00	9	50.00	
5. Food habits:								
a.	Vegetarian	42	42.00	15	35.71	27	64.29	5.11 df 1 S
b.	Non Vegetarian	58	58.00	34	58.62	24	41.38	
6. Information source about the illness:								
a.	Below 3000					30	30.00	
b.	3001 – 6000					20	20.00	
c.	6001 – 9000					37	37.00	
d.	9001 – 12000					13	13.00	
e.	above 12001							
6. Information source about the illness:								
a.	Mass media (TV, Radio, News Paper, Magazine)					40	40.00	
b.	Professionals (Doctor, Nurse, Health Personal)					28	28.00	
c.	Friends					16	16.00	
d.	Relatives					16	16.00	

Table 2: Assess the level of awareness regarding hypothyroidism during pregnancy among antenatal mothers with hypothyroidism:

Level of Awareness	f	%
Inadequate Awareness (<50%)	42	42
Moderate adequate Awareness (50 - 75 %)	34	34
Adequate Awareness (>75 %)	24	24

Figure 1: Level of awareness regarding hypothyroidism during pregnancy among antenatal mothers with hypothyroidism.



The above figure shows among 100 pregnant women 42 % had inadequate awareness and 24% had adequate awareness. There is significant association found with type of family, occupation, educational status and food habits at $p < 0.05$ and no association with regarding to demographic variables.

CONCLUSION;

The outcome of the study showed that there is inadequate awareness of disease among pregnant women with hypothyroidism. So there is a need to strengthen our system to educate pregnant women about the hypothyroidism for better maternal and fetal outcome,

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