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A DESCRIPTIVE STUDY TO ASSESS THE STATUS OF THYROID FUNCTION AND THE ACTIVITIES OF DAILY LIVING AMONG ANTENATAL WOMEN OF 3RD TRIMESTER WITH THYROID DYSFUNCTION ATTENDING ANTENATAL OUTPATIENT DEPARTMENT OF JAWAHARLAL NEHRU HOSPITAL & RESEARCH CENTER, SECTOR-9, BHILAI, CHHATTISGARH.

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ABSTRACT

Pregnancy is associated with significant but reversible changes in thyroid function which are a result of normal physiological state and hormonal changes that alter thyroid function. The study was carried out to assess the status of thyroid function and the activities of daily living among antenatal women of 3rd trimester with thyroid dysfunction attending Antenatal outpatient department of Jawaharlal Nehru hospital & Research center, sector-9, Bhilai, Chhattisgarh. A non-experimental research design was adopted and sample were 100 antenatal women who were non-randomly selected from the ANC OPD, Laboratory and Nuclear medicine. Status of thyroid function was assessed by thyroid stimulating hormone, T3, T4, Haemoglobin level and ultrasonographic reports. It has been analysed that majority 55% of antenatal women are active in daily living activities, 42% of antenatal women are moderately active in daily living activities, 3% of antenatal women are mild active in daily living activities and none of them were inactive. There was significant association between activities of daily living and T4 level, the calculated value i.e. 9.622 is more than the table value of chi square (7.82) at 0.05 level of significance. The thyroid test should be done to assess the status of thyroid function in each trimester. Routine antenatal visit and regular intake of antithyroid drugs can lead to better maternal and fetal outcome.

INTRODUCTION

Pregnancy is associated with significant but reversible changes in thyroid function which are a result of normal physiological state and hormonal changes that

alter thyroid function. These changes mean that laboratory tests of thyroid function must be interpreted with caution during pregnancy [1]. Thyroid disorders are the second most common endocrinology disorders found in pregnancy and of all the thyroid disorders in pregnancy, maternal hypothyroidism is most frequently observed in pregnancy [2]. The prevalence of hypothyroidism in pregnancy globally, is around 2.5%. In India around 4.8%

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Research Article



of pregnant women are affected with hypothyroidism

OBJECTIVES OF THE STUDY

- To assess the status of thyroid function through clinical profile and activities of daily living among antenatal women of 3rd trimester with thyroid dysfunction [3].
- To find the association between the status of thyroid function and the activities of daily living among antenatal women of 3rd trimester with thyroid dysfunction.
- To find the association between the activities of daily living with selected demographic variables and study parameter among antenatal women of 3rd trimester with thyroid dysfunction.

HYPOTHESIS

- H-0: There will be no significant association between the status of thyroid function and the activities of daily living among antenatal women of 3rd trimester with thyroid dysfunction.
- H-1: There will be significant association between the status of thyroid function and the activities of daily living among antenatal women of 3rd trimester with thyroid dysfunction.
- H-2: There will be significant association between the activities of daily living with selected demographic variables and study parameter among antenatal women of 3rd trimester with thyroid dysfunction [4-7].

MATERIALS AND METHODS

A Non- experimental research design was adopted to conduct the study. Target population was Antenatal women of 3rd trimester with thyroid dysfunction. A purposive sampling technique was utilized for selecting a sample of 100 antenatal women. Accessible population was 100 antenatal women of 3rd trimester with thyroid dysfunction of age group 20-45 years.

A self structured interview schedule were used to assess the status of thyroid function and the activities of daily living among antenatal women of 3rd trimester with thyroid dysfunction attending Antenatal outpatient department of Jawaharlal Nehru hospital & Research center, sector-9, Bhilai, Chhattisgarh.

The tool used for the study consisted of three sections

Section A:- Deals with the socio demographic variables such as age, religion, educational status, occupation, type of family, area of residence, type of diet, gravida, type of thyroid disorder, gestational age and study parameter.

Section B:- Deals with Body profile and Clinical profile to assess the status of thyroid function among antenatal women of 3rd trimester with thyroid dysfunction.

Section C:- Deals with self structured interview schedule

to assess the activities of daily living among antenatal women of 3rd trimester with thyroid dysfunction [8].

Expert opinion and content validity of the tools established by eight experts (Obstetrical & Gynaecological Nursing), one gynaecologist and two statistician. Reliability of self structured interview schedule for assessment of status of thyroid function and activities of daily living among antenatal women in third trimester was established by using Karl Pearson formula and 'r' was found to be 0.9. The tool was found valid and reliable.

Data collection was done from 8th -30th January 2014, for the main study. Formal written permission was taken from the Principal, ShriShankaracharya college of Nursing, Hudco, Bhilai. Consent of the sample was taken.

METHOD OF DATA ANALYSIS

The Data obtained from study were analysed and interpreted in terms of the objective. Descriptive and inferential statistics were used for data analysis. Socio demographic data and profile regarding study parameter were analysed in frequency and percentage.

Analysis of the status of thyroid function through clinical profile and activities of daily living among antenatal women of third trimester was done in frequency and percentage. Chi square analysis was used for the association between the status of thyroid function and the activities of daily living among antenatal women of 3rd trimester with thyroid dysfunction. Chi square analysis was used for the association between the activities of daily living with selected demographic variables and study parameter among antenatal women of 3rd trimester with thyroid dysfunction [9].

RESULTS

Out of 100 antenatal women of 3rd trimester with thyroid dysfunction, majority 100% subjects were of hypothyroidism and none of them were hyperthyroidism. Majority 55% of antenatal women are active in daily living activities, 42% of antenatal women are moderately active in daily living activities, 3% of antenatal women are mild active in daily living activities and none of them were inactive.

At 3rd trimester, 27% subjects having normal T4 level & 73% subject having abnormal T4 level, 17% Subject having normal TSH level and 83% subject having abnormal TSH Level.

DISCUSSION

Maximum subjects were belong to the age group of 20- 29 years i.e. 70% , distribution of the subjects according to the religion 59% belongs to Hindu religion, with reference to their area of residence depict that majority i.e. 95% belongs to urban area ,with reference to



the educational status shows that 42% subjects having Bachelor's degree, the findings regarding the gestational age of antenatal women shows that majority i.e. 38% subjects belongs to gestational age of 33-36 weeks and 38% subjects belongs to gestational age of 37-40 weeks, the findings regarding the gravida of antenatal women shows that majority i.e. 60% subjects belongs to primigravida, the findings regarding the type of family shows that majority i.e. 62% subjects belongs to joint family, with reference to the type of diet shows that majority i.e. 72% subjects consume Non-vegetarian diet, the findings regarding the type of thyroid disorder shows that majority i.e. 100% subjects having Hypothyroidism.

In the present study, it has been analysed that there is no association of activities of daily living with any of the body profile which includes body weight, pulse rate, blood pressure, body temperature, skin texture, face, hair, eye, thyroid gland and extremities.

There was significant association between activities of daily living and T 4 level, the calculated value i.e. 9.622 is more than the table value of chi square (7.82) at 0.05 level of significance. Hence, Hypothesis H1 was accepted.

There was no significant association between activities of daily living with the study parameter among antenatal women of 3rd trimester with thyroid dysfunction.

RECOMMENDATIONS

- A study can be carried out to assess the thyroid function in antenatal women in each trimester with large sample size.

REFERENCES

1. Ambika GU, Usha VM. (2011). Thyroid disorders in India: An epidemiological perspective.
2. Ladan M, Atieh A, Hossein D, Sahar A, Mehdi H. (2013). Trimester-Specific Reference Ranges for Thyroid Hormones In Iranian Pregnant Women.
3. Corinne R, Samuel D, Jack H and Ann M. (1999). Gronowski, Thyroid Function during Pregnancy. *Clinical Chemistry*, 45(12), 2250-2258.
4. Brent GM. (1997). Thyroid Function: Interpretation of thyroid function tests in pregnancy, department of medicine. *West Los Angeles Medical Center*, 40(1), 3-15.
5. Vaidya B, Anthony S, Bilous M, Shields B. (2011). Influence of hypothyroidism & subclinical hypothyroidism on pregnancy and its outcomes,
6. Kate Freer. (2010). Foods and lifestyle habits that affect thyroid function changes you can make to boost thyroid function.
7. Xnanj S. (2013). Analysis of pregnancy outcomes of hypothyroidism during pregnancy.
8. Gregory A. (2014). Diagnosing thyroid dysfunction in pregnant women: is case finding enough.
9. Stricker RT, Chenard ME, Eberhart R, Chevaller MC and Perez V. (2007). Evaluation of maternal thyroid function during pregnancy: the importance of using gestational age-specific reference interval. *Clinical pharmacy*, 27, 842-851.

- A similar type of study can be conducted in any other setting such as in the rural area and community health center.
- A comparative study can be carried out to assess the thyroid function in pregnant and non-pregnant women.
- A study can be conducted to find the prevalence of thyroid disorder in antenatal women.
- A study may design to explore the knowledge and attitude of women regarding thyroid dysfunction & its outcome.
- A similar study can be conducted to assess the effect of thyroid disorders on pregnancy and its outcome.

CONCLUSION

From the study, it has been analysed that from 100 antenatal women maximum were having hypothyroidism in which majority were of age group 20-29 years. Majority of antenatal women of third trimester having T4 level raised and 55% of them are active in activities of daily living. Thyroid function test should be done to assess the status of thyroid function in each trimester. Routine antenatal visit and regular intake of antithyroid drugs can lead to better maternal and fetal outcome.

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Conflict of Interest: nil

