

Drug compliance and patient related factors associated with levothyroxine therapy for patients with Hypothyroidism

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Introduction

Hypothyroidism is a relatively common chronic disease affecting 2-3% of general population worldwide. Treatment is life-long levothyroxine. The main problem with treatment for any chronic disease is poor drug compliance. Major influence for drug compliance is caused by patient related factors. This study aims to investigate how patient related factors affect the compliance for levothyroxine therapy.

Aim

To find out Association of Patient Related Factors on Drug Compliance for levothyroxine therapy.

Materials and methods

This was a questionnaire based cross sectional study which was conducted in Diabetes and Endocrine Unit, Teaching Hospital, Karapitiya. First 100 individuals attending the endocrinology clinic with the diagnosis of hypothyroidism on replacement levothyroxine therapy were selected by convenience sampling. Compliance was measured using a modified version of a study instrument which was used on patients with hypertension, another non-communicable disease. Total composite score of this instrument was 13 and an arbitrary value 10 was selected as the cut-off for non-compliance. A score of above 10 indicated high compliance. Chi-square test was applied to compare the compliance status with patient related factors.

Results

Hypothyroidism was most common in the age category of 45-54yrs. Among participants, 87% were females. The total compliance rate for levothyroxine therapy in this study was 65%. There was no significant difference in compliance with different socio-demographic groups (i.e. age, gender, ethnicity, marital status, occupational status, monthly income, and educational level), duration of the illness, number of co-morbidities, knowledge about hypothyroidism or status of physical impairment. There was a significantly higher compliance in the group in which the “doctor strongly emphasized the importance of taking medication regularly”, studied under the patient prescriber relationship (chi-square value 4.071, table value at 5% 3.841). Other behaviors of prescriber which were under the patient prescriber relationship did not show any significant influence on compliance. The distance to the clinic also had a significant influence on compliance (chi-square value 7.091, table value at 5% 5.991).

Conclusion

The total compliance in levothyroxine therapy was 65%. Distance to the clinic and practice of doctor “strongly emphasizing importance of taking medication regularly” positively affected for compliance in levothyroxine therapy of patients with hypothyroidism.