Preliminary data from one of the two study districts shows a prevalence of thyroid disease of 2.7% (0.4/1000 M, 2%/1000 F). Vision was screened in all respondents aged 3-6 years and 16.2% (166/1023) had low vision. Among those with a positive family history of thyroid disease, 10.1% (12/119) were found to have low vision.

Methods
A cross-sectional study was performed in two coastal districts of rural Selangor. A village from each district was chosen where a participant from each household from the village was selected using Kish tables. Sociodemographic measurement and thyroid examination were performed. The presence of goitre was recorded according to the World Health Organization (WHO) goitre grading system. Blood withdrawn was tested for thyroid function and thyroid autoantibodies. Thyroid antibodies analyses were done using Immulite 2000 system. The detection limit for antithyroglobulin (antiTPO) and anti-thyroglobulin (antiTG) are 10 IU/mL and 20 IU/mL respectively.

Results
A total of 418 subjects were recruited with a mean age of 54.1 ± 14.2 years. Majority were Malays (86.8%), followed by Indians (11.7%) and Chinese (1.4%). Among respondents, 2.9% had Grade 1 and 8.9% had Grade 2 goitre. A mere 3.4% had clinically palpable thyroid nodules (Figure 1). A total of 411 blood samples were available for thyroid level assessment. At time of examination, 9.3% of respondents were found to have hyperthyroidism while 85.8% had TSH in the range of 0.32-2.5 mIU/L. The prevalence of overt and subclinical hypothyroidism was 0.2% and 1.7% respectively. On the otherhand, low prevalence of hypothyroidism (TSH < 0.32 mIU/L) with prevalence of overt and subclinical hypothyroidism being 0.5% and 2.9% respectively (Figure 3).

Discussion
The low prevalence of thyroid disorders in this cohort is possibly due to the fact that coastal communities are generally iodine sufficient. In 2008, WM Wan Nazimoon et al, reported that the median urinary iodine level in the state of Selangor – 126 ug/L (designated as iodine sufficient area by WHO/ICCIDD/UNICEF criteria)*. Comparison made with other studies in Malaysia revealed according to the World Health Organization (WHO) goitre grading system. Blood withdrawn was tested for thyroid function and thyroid autoantibodies. Thyroid antibodies analyses were done using Immulite 2000 system. The detection limit for anti-thyroglobulin (antiTPO) and anti-thyroglobulin (antiTG) are 10 IU/mL and 20 IU/mL respectively.

Conclusion
The low prevalence of thyroid antibodies and thyroid disorders in coastal communities could be attributed to the iodine sufficient status in those areas. Euglycemic respondents with moderate and high antiTPO titres tend to have higher TSH levels, while those with moderate and high antiTPO titres had lower TSH levels.