

How frequent that serum Thyroid Stimulating Hormone (TSH) had been ordered according to guidelines in hypothyroid patients visiting Mairid primary health clinic (PHC)?

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Introduction

Clinical hypothyroidism affects 1 in 300 people in United States, it is more common in females and older patients. The symptoms range from minimal (cold intolerance, fatigue, weight gain, dry skin) to life- threatening (myxedema coma). Serum Thyroid Stimulating Hormone (TSH) is the single best screening test for primary hypothyroidism for majority of outpatient clinical sitting. Levothyroxine is the mainstay of treatment for hypothyroidism, and is one of the World Health Organization’s (WHO) essential medicines required for basic health care.

In Gulf Cooperation Council (GCC) countries, hypothyroidism is common but underdiagnosed. Untreated hypothyroidism have a significant economic impact, especially with regard to costs associated with infertility, maternal hypothyroidism, congenital hypothyroidism, musculoskeletal and gastrointestinal symptoms.

According to the guideline developed by American Association of Clinical Endocrinologists (AACE) together with American Thyroid Association (ATA) patients who received initial treatment for established hypothyroidism should have TSH measurement done at 4-8 weeks, and after 6 and 12 months once adequate dose has been determined.

Aim

To improve clinical practice and to monitor the use of serum TSH rationally in regard of the cost and according to the available guidelines.

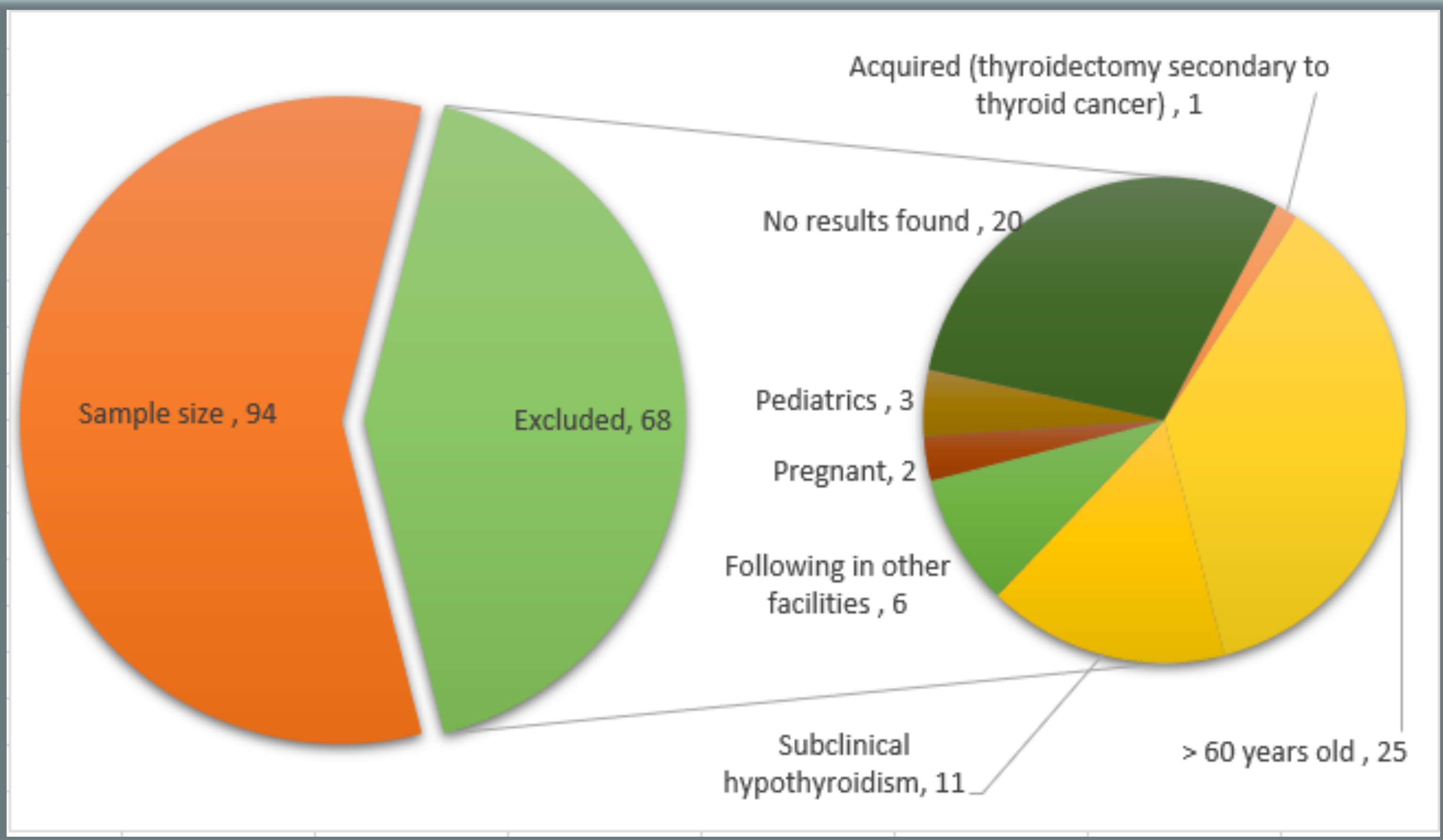
Methods

The audit conducted retrospectively for the period between July 2020- September 2020, the population was chosen according to the following criteria:

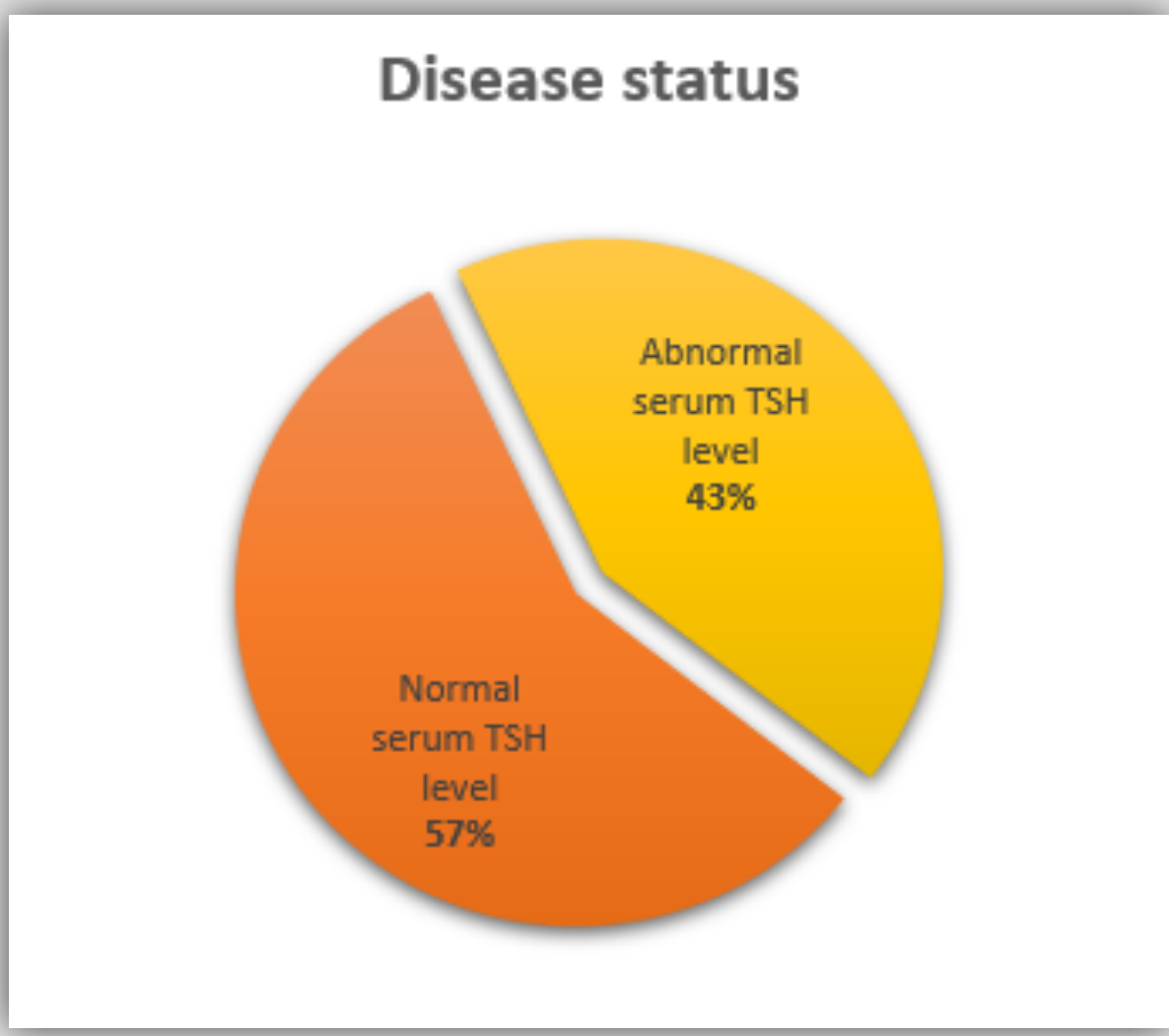
- Patients with normal TSH level, should have periodic TSH measurements after 6 months and 12 month intervals.
- Patients with abnormal TSH level, should have serum TSH measurements done at 4-8 weeks.

Retrieved 162 files from registry list of Mairid PHC. I included Hypothyroid patients visiting Mairid PHC for investigations and excluded pregnant patients, pediatrics patients, patient over age of 60 years, subclinical hypothyroidism, central hypothyroidism, adrenal insufficiency and post thyroidectomy due to history of thyroid cancer.

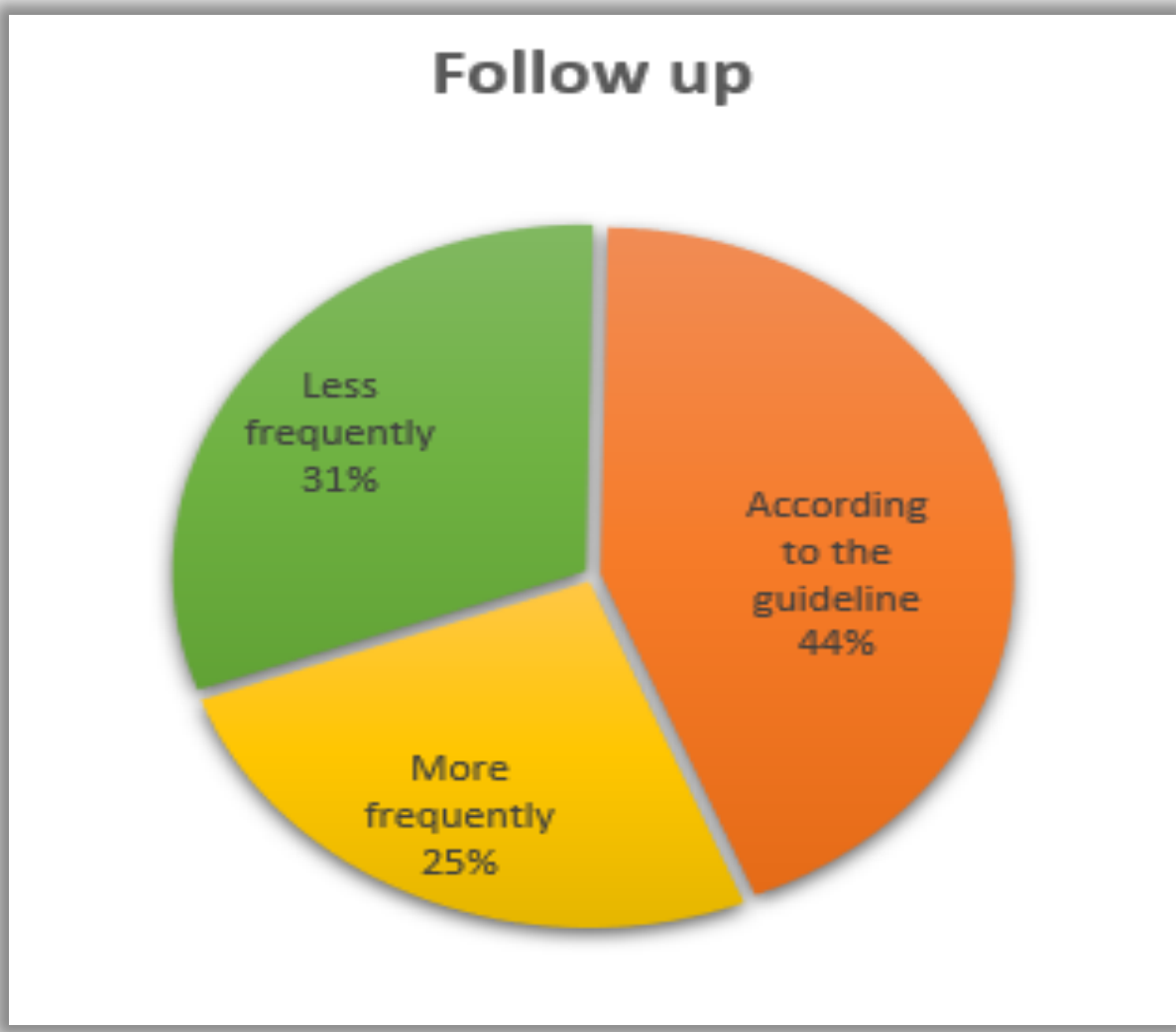
Accordingly, the sample size was 94 patients. The data were collected and analyzed using Microsoft Excel.



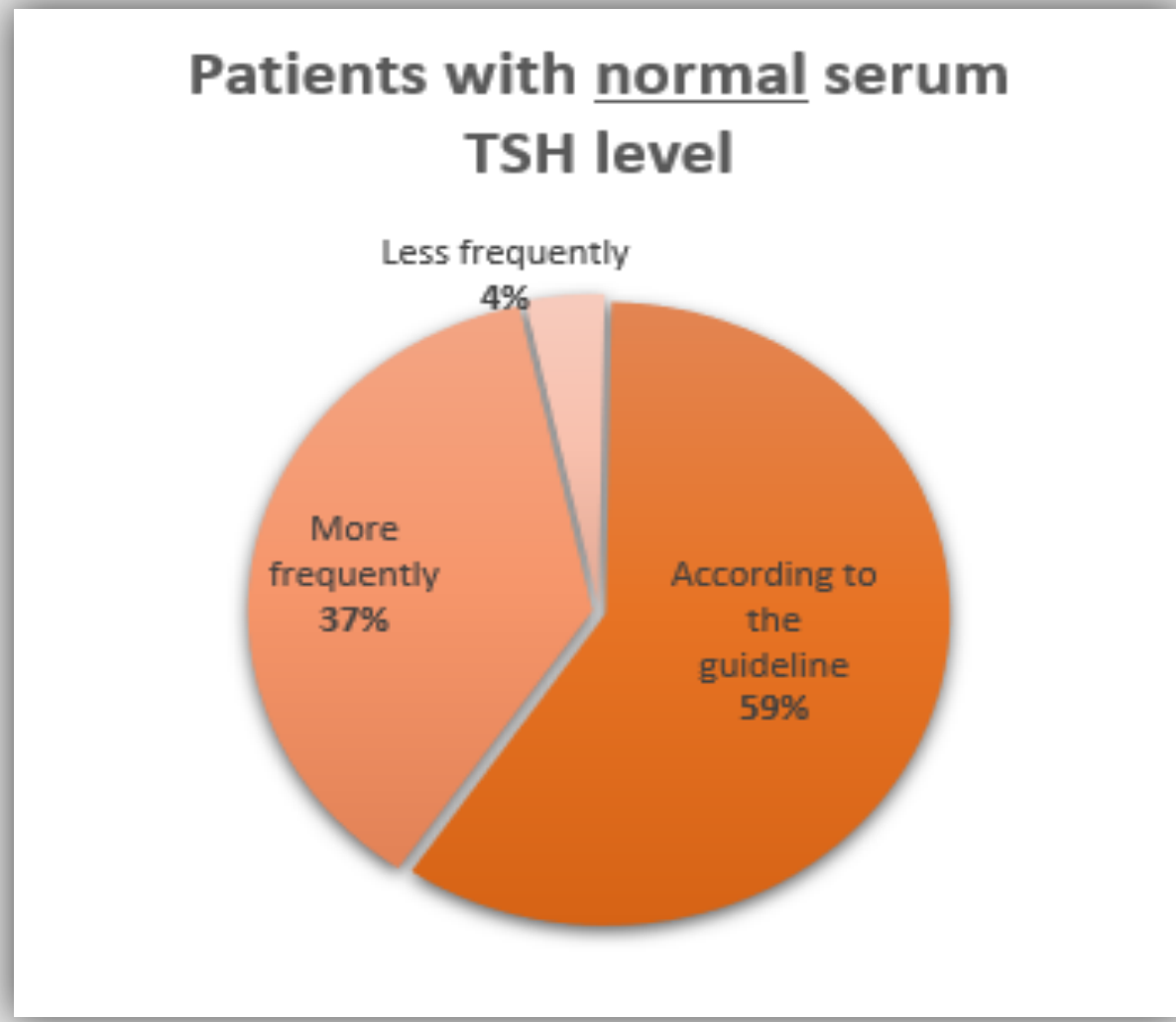
Results



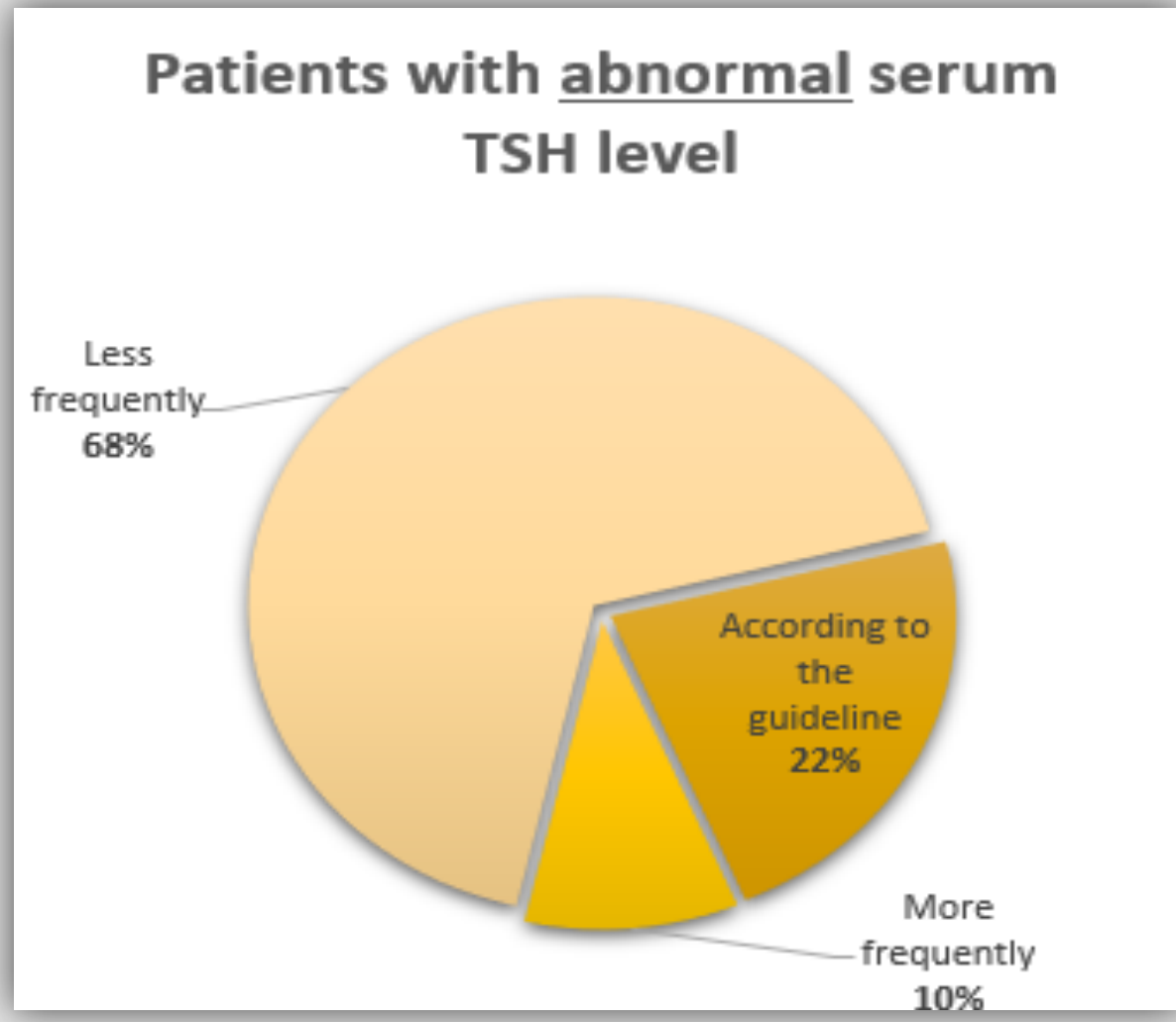
Comparing AACE/ATA guideline with the data from Mairid PHC I found that the majority (57%) of the patients being treated for established hypothyroidism had a controlled disease.



In general, a 44% of total patients were following according to the guideline.



More than half (59%) of the patients with normal TSH were following according to the guideline.



A clear difference can be noticed in patients with abnormal TSH level, less than quarter (22%) of those patients were following according to the guideline.

Recommendations

I recommend an adequate patient education about the nature of the disease, the importance of a regular follow up and compliance with the medication.

Family physicians should be aware about the available guidelines and encouraged to be updated regularly through e.g: CME sessions, attending related conferences, peer discussion, ..etc.

I recommend to use the electronic system effectively in documenting important informations about the patients, also to use the telemedicine in following the patients who need to follow in a long intervals; this will help to maintain and ensure the continuity of care and will help to address any concerns that may need an immediate action.

Conclusion

Hypothyroidism is a common chronic disease worldwide, if left untreated and/or uncontrolled will cause a significant impact on the society. We can benefit from the international guidelines in following hypothyroid patients. The the interval periods should be individualized according to disease status.