RISK FACTORS AND PREVALENCE OF HYPOTHYROIDISM IN PETRA REGION SOUTH OF JORDAN

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DEDICATION

I dedicate my dissertation work to my mother's soul, my father and my family members.

I dedicate this work and give special thanks to William, Elias and Tala

who made it possible for me to complete it.

I also dedicate this dissertation to my best friend Tahreer Al-Nawaiseh

for being there for me throughout the last 15 years

and to my lovely nephew Dr. Asem Al-nawafleh you have been my best cheerleaders.

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List of abbreviations

Abbreviation	Definition
AITD	Autoimmune thyroid disease.
BMI	Body Mass Index
IDD	Iodine Deficiency Disorder.
KAP	Knowledge, Awareness and Practice
PCOS	Poly Cystic Ovary Syndrome
QoL	Quality of Life
QRH	Queen Rania Hospital
RAI	Radioactive Iodine
RIT	Radio Iodine Therapy
SPSS	Statistical Package of Social Science
T3	free tri-iodothyronine
T4	free thyroxine
TFT	Thyroid Function Test
TG	Thyroglobulin
TPO	Thyroid Peroxidase
TSH	Thyroid Stimulating Hormone
WHO	World Health Organization

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ABSTRACT

Hypothyroidism is the second most important endocrine disorders, and its prevalence reaches 7% worldwide. There are many etiologies of hypothyroidism, and where a low knowledge coupled with inadequate health literacy may lead to poor disease control, prevention and adherence. This study aimed to explore the main etiology of hypothyroidism at Petra region, and measure patients' knowledge, awareness and practice (KAP) according to the hypothyroidism and adherence to treatment.

A cross-sectional study was conducted at Queen Rania Hopital. Hypothyroidism participants (n=150), aged ≥18 years, from Petra, responded to the validated questionnaires. Blood samples were collected to measure antithyroid antibodies. A total of 150 participants completed the questionnaire. The median age of the participants was 41.5 ± 13.5 years; with the majority being females (92.7%). Blood analysis showed that 62.7% of the sample had positive antithyroid antibodies which are the highest prevalent risk factor in the region, the life style and iodine intake as second risk factors, 62% of patients had a family history and 20.1% of females diagnosed during pregnancy or postpartum. Also, other diseases

showed high risk such as diabetes (22.7%) and vitamin D3 deficiency (36%). According to the total score of KAP majority of the sample had poor and low level of knowledge and awareness regarding hypothyroidism. In addition to, 82% of participants were adherent to thyroxine, and the proportion of patients whose thyroid hormonal level was controlled was 56.7%. This study concluded that a large number of patients were lacking basic knowledge about hypothyroidism and they had dietary and treatment-related misconceptions, which may affect disease controlling and adherence to treatment. Thus, health care providers should educate and counsel patients in order to improve their knowledge regarding disease and adherence. The most prevalent etiologies of hypothyroidism are female gender, autoimmunity (Hashimoto's), family history, the geographical region of Petra, life style and poor iodine intake.