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Data Article

Risk factors accelerating hypothyroidism in pregnant women referred to health centers in Abadan, Iran



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ABSTRACT

The present work contains data obtained during the analysis of pregnant women referred to Abadan Health Centers Organization (Abadan HCO) with confirmed acute hypothyroidism diagnosis. From among all pregnant women referred to Abadan HCO, 600 were chosen consisting of 120 pregnant women from each of the health centers in quintuple areas. In this paper, the effects of family history, occupation, death, abortion, type of diabetes, smoking, lithium consumption, allergy, radiotherapy, ovarian cysts (OC) and oral contraceptive pills (OCP) consumption have been studied (Yassaee et al., 2014) [1]. After completion of the questionnaires by the patients, the obtained coded data were fed into ECSELL software. Statistical analysis of the data was carried out using Special Package for Social Sciences version 16 (SPSS 16).

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Abbreviations: Abadan HO, Abadan Health Organization; OCP, Oral Contraceptive Pills; OC, Ovarian Cysts

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Specifications Table

Subject area	<i>Medicine, clinical research</i>
More specific subject area	<i>Risk factors accelerating hypothyroidism</i>
Type of data	<i>Table, figure</i>
How data was acquired	<i>Functional clinical assessment of the pregnant women and researcher-made questionnaire analysis</i>
Data format	<i>Raw, analyzed, Descriptive and statistical data</i>
Experimental factors	<ul style="list-style-type: none"> - <i>Sample consisted of pregnant women referred to different Abadan Health Centers Organizations.</i> - <i>After Inviting the pregnant women, the researcher-made questionnaire including demographic data as well as the hypothyroidism questionnaires were completed.</i> - <i>In this paper, the effects of abortion, smoking, family history, occupation, death, type of diabetes, lithium consumption, allergy, radiotherapy, ovarian cysts (OC) and oral contraceptive pills (OCP) consumption on accelerating hypothyroidism have been studied.</i>
Experimental features	<i>Hypothyroidism is one of the factors endangering pregnant women.</i>
Data source location	<i>Abadan, Iran</i>
Data accessibility	<i>Data is included in this article.</i>

Value of the data

- These data describe factors affecting acceleration of hypothyroidism in pregnant women and helps with educating the community for the control and prevention of this disease.
- Due to the importance of the risk factors of hypothyroidism in pregnancy (Williams Obstetrics and Gynecology), these factors are discussed in this article.
- The results showed that hypothyroidism can be harmful for pregnant women.
- The results of this study can be used to develop a prevention program to decrease hypothyroidism in pregnant women.
- Results are also important for patients with hypothyroidism especially pregnant women referred to health centers.

1. Data

Table 1 represents demographic characteristics of pregnant women referred to Health Centers Organization, Abadan, Iran during 2016 used for description of experiments. Table 2 shows data for factors accelerating hypothyroidism in pregnant women referred to Abadan HCO. Among all factors, family history had the highest score. The results showed that the most important causes of accelerating hypothyroidism in pregnant women were related to the family history ($P=0.00038$). Factors related to hypothyroidism were abortion, smoking, occupation, death, type of diabetes, lithium consumption, allergy, radiotherapy, OC and OCP consumption $P=0.0035$, $P=0.001$, $P=0.0042$, $P=0.0006$, $P=0.00056$, $P=0.056$, $P=0.0038$, $P=0.06$, $P=0.002$, $P=0.00042$, respectively.

Table 1
Demographic characteristics of pregnant women referred to health centers.

Parameter	Characteristics	Number (in percent)
Age group	12–19	50 (8.33%)
	20–29	365 (60.83%)
	30–39	150 (25%)
	40–49	30 (5%)
	More than 50	5 (0.84%)
Occupation	Housewife	485 (80.83%)
	Employed	115 (19.17%)
Residence	Urban	600 (100%)
	Rural	0 (0%)
Nationality	Iranian	588 (98%)
	Neighboring Countries (Iraqi, Kuwaiti)	12 (2%)

Table 2
Ranking of factors affecting the accelerating hypothyroidism in pregnant women based on their importance.

Factors	P value
Family history	0.00038
Occupation	0.0042
Death	0.0006
Abortion	0.0035
Type of diabetes	0.00056
Smoking	0.001
Lithium consumption	0.056
Allergy	0.0038
Radiotherapy	0.06
Ovarian Cysts (Oc)	0.002
Oral Contraceptive Pills (OCP) consumption	0.00042

2. Experimental design, materials and methods

2.1. Study area description

All Health Centers Organizations based in 5 areas (North, South, East, West, and Center) of the city of Abadan were selected. Having a population of 300,000 people, Abadan is one of the metropolitan areas in the Khuzestan province [2]. Khuzestan province climate is hot and semi-humid with long summers and short winters [3,4]. Abadan is Located in the south of Khuzestan province in the southwest of Iran (see Fig. 1).

2.2. Experimental design, materials and methods

The five Health Centers Organizations were chosen from around Abadan, Iran. 600 pregnant women referred to Abadan Health Centers Organizations participated in this study. In this study, data was gathered from the thyroid screening program for pregnant women with a gestational age of less than 20 weeks (Including TSH, FT3, FT4, TT3, TT4 tests) as well as a researcher-made questionnaire (based on the risk factors adopted from Williams' Obstetrics and Gynecology) including the demographic data (e.g. age, sex and experience) and questions which were related to the causes and factors affecting acceleration of hypothyroidism including abortion, smoking, family history, occupation,

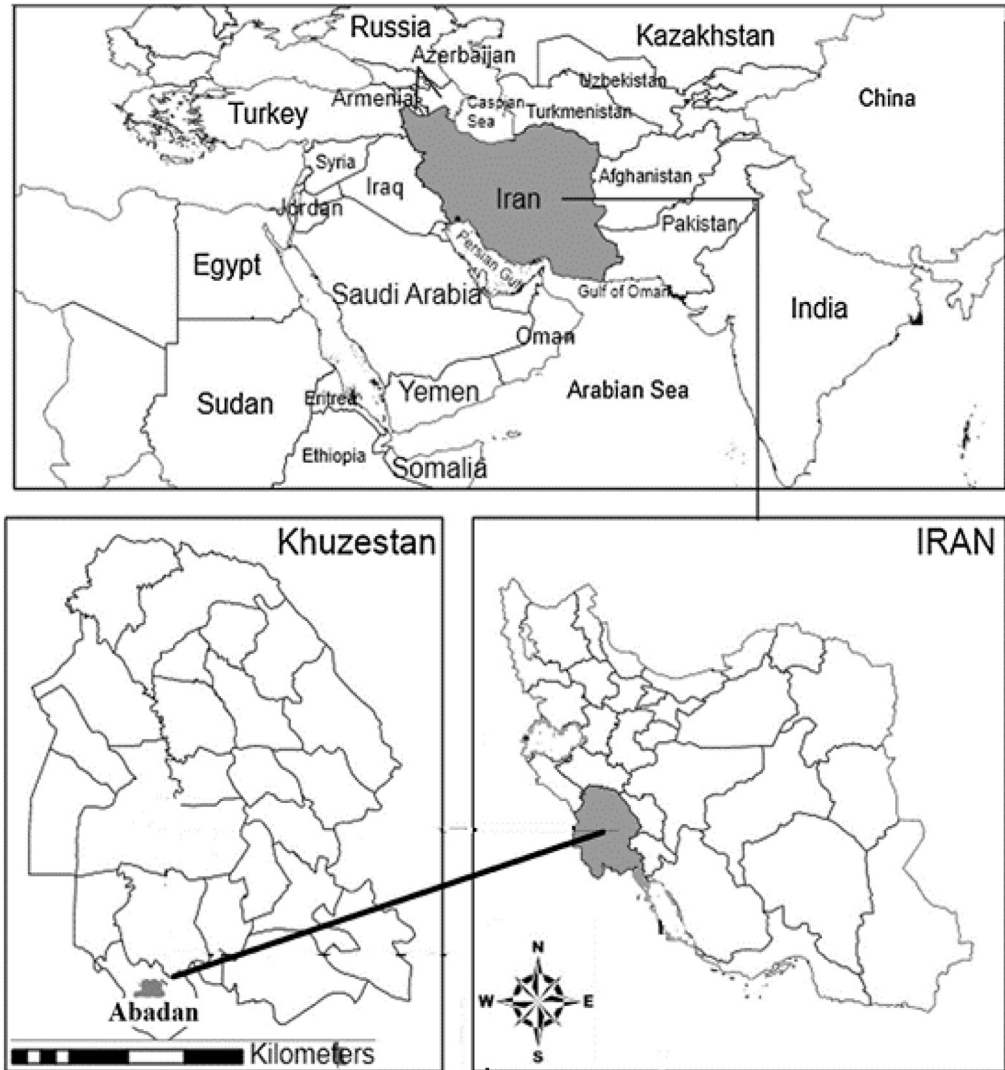


Fig. 1. Location of Abadan in the southwest of Iran.

death, type of diabetes, OC, allergy, radiotherapy, lithium and OCP consumption [5,6,7,8]. Then the collected data were coded and entered into SPSS version 16. Data analysis was performed using SPSS-16. All risk factors were analyzed. The data were analyzed applying descriptive and statistical tests including independent t-test and chi-square.

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Transparency document. Supplementary material

Transparency data associated with this article can be found in the online version at <http://dx.doi.org/10.1016/j.dib.2017.07.013>.

References

- [1] F. Yassaee, M. Farahani, A.R. Abadi, Prevalence of subclinical hypothyroidism in pregnant women in Tehran-Iran, *Int. J. Fertil. Steril.* 8 (2014) 163–166.
- [2] M.J. Mohammadi, N. Rajaei Behbahani, S. Geravandi, M. Momtazan, M. Mahboubi, R. Alizadeh, Association of mortality rate caused by traffic accidents in Abadan during 2012–2013, *Arvand, J. Health. Med. Sci* 2 (2017) 23–28.
- [3] R. Nashibi, S. Afzalzadeh, M.J. Mohammadi, A.R. Yari, F. Yousefi, Epidemiology and treatment outcome of mucormycosis in Khuzestan, Southwest of Iran, *Arch. Clin. Infect. Dis.* 12 (2016) e37221.
- [4] M. Khaefi, S. Geravandi, G. Hassani, A.R. Yari, F. Soltani, S. Dobaradaran, S. Moogahi, M.J. Mohammadi, M. Mahboubi, N. Alavi, M. Farhadi, Association of particulate matter impact on prevalence of chronic obstructive pulmonary disease in Ahvaz, southwest Iran during 2009–2013, *Aerosol. Air Qual. Res* 17 (2017) 230–237.
- [5] M. Dehghani Zahedani, A. Azinfar, K. Mahouri, S. Mehrdad, The identification of related risk factors of thyroid disorder in an Iranian pregnant population, *Iranian, J. Endocrinol. Metab.* 12 (2010) 352–358.
- [6] F. Azizi, H. Delshad, Thyroid derangements in pregnancy, *Iranian, J. Endocrinol. Metab.* 15 (2014) 491–508.
- [7] C.M. Tudela, B.M. Casey, D.D. McIntire, F.G. Cunningham, Relationship of subclinical thyroid disease to the incidence of gestational diabetes, *J. Obstet. Gynaecol.* 119 (2012) 983–988.
- [8] M. Ohashi, S. Furukawa, K. Michikata, K. Kai, H. Sameshima, T. Ikenoue, Risk-based screening for thyroid dysfunction during pregnancy, *J. Pregnancy* 2013 (2013) 1–5.