

ANALYSIS OF ANEMIA IN SYRIAN IMMIGRANT PREGNANT WOMEN

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ABSTRACT. Anemia is one of the most common blood diseases in the world. During pregnancy, the body produces more blood for the baby to grow. However, if you don't get enough iron and other nutrients, the body may not be able to produce red blood cells to make that extra blood. It is normal to have a minor degree of anemia during pregnancy, but if it is severe and left untreated it can increase the risk of serious complications such as premature birth. Pregnancy and childbirth complications are among the most common health problems among newly arrived immigrants to a particular country. It was aimed to determine the effects of some socio-demographic and health characteristics on anemia in Syrian migrant women and to analyze the effect on the baby after birth.

Keywords: *anemia, immigrant, pregnant, gynecology, obstetrics*

INTRODUCTION

Anemia is the most common comorbidity affecting almost half of all pregnancies [1]. Hemoglobin concentration less than 11.0 g/dl or hematocrit less than 33% is considered anemia in pregnancy according to the World Health Organization (WHO) and Centers for Disease Control and Prevention (CDC) definitions [2, 3]. The prevalence of anemia varies across low-income countries from 53.8% to 90.2% and high-income countries from 8.3% to 23% and iron-deficiency anemia is the major type of anemia due to nutritional deficiencies of iron [2, 4]. Anemia in pregnancy is associated with poor obstetric outcomes as premature rupture of membrane, preterm delivery and premature birth, neonatal sepsis, fetal hypoxia, fetal growth restriction, low birth weight and fetal death [5, 6]. 12% of low birth weights, 19% of preterm births, and 18% of perinatal deaths in low- and middle-income countries are due to anemia [7]. Pregnancy and childbirth complications are among the most common health problems among newly arrived immigrants to a particular country. Women migrants, on the other hand, experience special problems in areas such as pregnancy, birth and child health, sexual and reproductive health. Immigrants' being more vulnerable to the risks associated with population movements (reproductive health problems, high infant mortality) also makes them more vulnerable to disease. Age-specific prevalence of anemia in different stages of pregnancy in 2014-2018 [8]. This study, it was aimed to determine the effects of some socio-demographic and health characteristics on anemia in Syrian migrant women and to analyze the effect on the baby after birth.

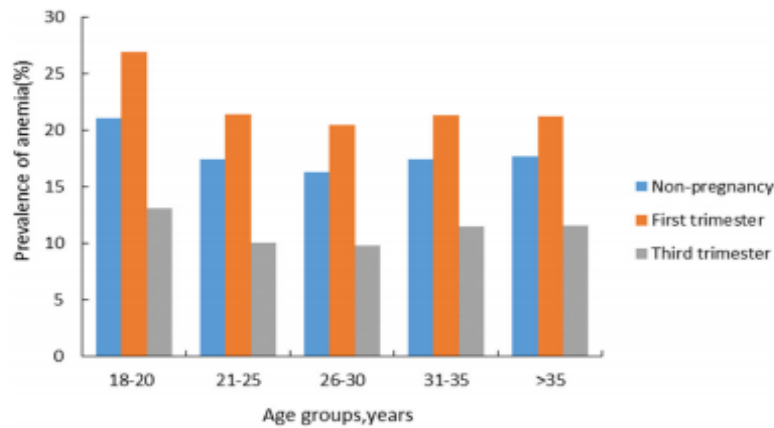


Fig. 1. Age-specific prevalence of anemia in different stages of pregnancy in 2014-2018

MATERIALS AND METHODS

Evaluations were made with 1328 data and 13 features in total. Data is collected from patient files examined at a university hospital in Turkey. Age, Working Condition, Living Place, Job, Additional Disease, Hb, Htc, Follow, Nutrition Support, and smoking are features that play an important role in determining the patient's anemia. The data was analyzed by using Statistical Package for the Social Sciences (SPSS)-26.0 program. ANOVA and Pearson-Correlation test were used for the correlations. $p < 0.01$ was considered statistically significant.

RESULTS AND DISCUSSION

According to the demographic characteristics in Table 1, in our data set, it is seen that mostly 444 people are between the ages of 21-35, 708 people do not work, 768 people live in cities and 621 people live in countryside areas, 711 people are housewives.

Table 1. List of demographic attributes in the data set

Variables	Frequency	Percent
<=20	279	21
21-35	445	33,5
36-44	375	28,2
45 and above	230	17,3
Working Condition		
Not working	708	53,3
Working	621	46,7
Living Place		
City	768	57,8
Countryside	561	42,2
Job		
Housewife	711	53,5
employee	481	36,2
Officer	120	9
Others	17	1,3

According to the other characteristics investigated in Table 2, 500 of the pregnant women were in the 1st trimester, the number of births was 708 and 5 or more, almost half

of the pregnant women had a risky pregnancy, 718 did not have any additional disease, 193 people had diabetes, 148 people had hypertension, 596 people had a hemoglobin value above 11.5, the Htc value of 880 people was 31.5 and below, almost half of them could not be followed, 934 pregnant women did not receive nutritional support and 955 did not smoke.

Table 2. List of other attributes in the data set

Variables	Frequency	Percent	
Pregnancy Week	1.trimester	500	37,6
	2.trimester	536	40,3
	3.trimester	293	22
Number of Births	Not birth	257	19,3
	1-4 birth	364	27,4
	5 and above birth	708	53,3
Risky Situation	No	679	51,1
	Yes	650	48,9
Additional Disease	No	718	54
	Diabetes	193	14,5
	Hyper tension	148	11,1
	Cardiac	103	7,8
	Lung	60	4,5
	Nervous System	23	1,7
	Hematological	84	6,3
Hb	Hb>11.5	596	44,8
	10<Hb<11.5	618	46,5
	8<Hb<10	101	7,6
	Hb<8	14	1,1
Htc	31.6 and above	449	33,8
	31.5 and under	880	66,2
Follow	Not follow	572	43
	With irregular follow-up	557	41,9
Nutrition Support	No	931	70,1
	Yes	398	29,9
Smoking	No	955	71,9
	Yes	374	28,1

As seen as in Table 3, when it was examined whether anemia stories differ in relation to some demographic variables in the people who participated in the study; It has been observed that it differs with the age variable and this difference originates from all age groups ($p < 0.01$). No significant difference was found in terms of work status and place of residence ($p > 0.01$). A significant difference was observed for the job variable and it was found that this difference was caused by people working in other jobs ($p < 0.01$). The difference arising from the trimester was determined ($p < 0.01$). The difference for the comorbidity variable was found to be different in other disease groups other than lung

disease ($p < 0.01$). For the smoking variable, it was observed that the history of anemia changed in smokers and non-smokers ($p < 0.01$).

Table 3. ANOVA for Differences Between Anemia History and Variables

Variables	Sig.
Age	0,000
Working Condition	0,255
Living Place	0,330
Job	0,000
Pregnancy Week	0,000
Additional Disease	0,000
Hb	0,000
Smoking	0,000

When the correlations in Table 4 are examined, a positive correlation was observed between age, job, status, occupation, comorbidity and smoking status and anemia history, while a negative relationship was found between place of residence, pregnant week and Hb values.

Table 4. Anemia History Correlations of Variables

Variables	Anemia History Correlations
Age	0,216
Working Condition	0,031
Living Place	-0,033
Job	0,000
Pregnancy Week	-0,322
Additional Disease	0,254
Hb	-0,092
Smoking	0,235

Finally, when the baby is born after pregnancy, the relationship between the pregnant week and birth weight was examined, and a negative correlation was found between the pregnant week and the birth weight (Table 5).

Table 5. Anemia History Correlations of Week of birth and Birth weight

Variables	Anemia History Correlations
Week of birth	-0,084
Birth weight	-0,072

CONCLUSION

As a result of this study, it has been understood that anemia history has significant differences especially for age, occupation, pregnant week, comorbidity, Hb, Smoking

variables. In addition, when the direction of this relationship was tried to be examined, a negative relationship was found for the place where he lived, pregnant week and Hb values. From here, a negative relationship known with the Mediterranean anemia characteristics of people, anemia that increases with the increase of the pregnant week with more blood supply to the baby and naturally an anemia condition that occurs as a result of a decrease in Hb value has been determined. Finally, the study revealed that pregnant women with anemia history have earlier birth weeks and lower birth weight.

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