



## The Individual Characteristics Effectiveness of Rural Pregnancy Women on Instantaneous Abortion

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### ABSTRACT

*Background: Instantaneous abortion was not common in Iran. Rural pregnancy women knew little about spontaneous abortion. Object: The purpose of this paper was to determine individual characteristics effectiveness of rural pregnancy women on spontaneous abortion. Method: The study was conducted on 40 rural pregnancy women of rural pregnancy woman in villages with mean first age of marriage 16.20±2.32 to 20.10± 3.12 years old and cross-sectional study from September 2012 to June 2013 by following the spontaneous abortion women in villages in east-south in Iran. The body mass index (BMI), age of first marriage, age of first pregnancy, age of first delivery, length, weight and over weight of rural pregnancy women were compared in four villages from Iranshahr and Sarbaz city in Blouchestan in Iran. Analysis of the data was Student's T-tests, Chi-Square method, with statistically significant effects which were accepted for  $p < 0.05$ , and 95% confidence interval (95%CI). Results: The mean of first age of pregnancy and delivery were 17.20±2.54, 21.00±3.20 and 24.30±7.06, 30.90±6.12 respectively. The individual characteristics in villages of Iranshahr city was less than villages of Sarbaz city. The effectiveness of all above-mentioned factors on spontaneous abortion except body weight was significant. Conclusion: A completely programmed surveillance during pregnancy was necessary for spontaneous abortion among rural pregnancy women.*

**KEYWORDS :** spontaneous abortion, rural woman, body weight index, age, pregnancy, over weight

### Introduction:

Spontaneous abortion meant an unknown factor terminate fetus alive in a pregnancy woman at a moment under (1). This factor might be a microbial, a viruses and psycho logic factor. Pregnancy woman did not interfere on doing it (2). The spontaneous abortion causes risk and needs to do a caution; however, it is better to offer women to complete information when facing spontaneous abortion (3). The pregnancy of woman is terminated by abortion and may cause disease. The mother disease influences not only on its life quality, but it affects on life quality of fetus and heredity in future. Researches demonstrate that there are reasons for women to seek abortion. Some women state only one factor that contributes to their desire to do abortion, others point of factors that, cumulatively, result in to seek abortion. Although primary prevention of unintended pregnancy is optimal, among women who choose to terminate their pregnancies, increased access to services that may increase the proportion of spontaneous abortion performed at lower-risk, early gestational ages and help further decrease deaths (4). The women reveal anxious to do spontaneous abortion due to hardness of action (5). The majority of women seek a way for spontaneous abortion which it may not be a desire way. On the other hand, they do not know additional information about other low risk method such as contraception on the day of the instantaneous abortion (6). The individuals characteristic comparison among the strongest religious beliefs women with only somewhat religious women show they have higher levels of individuals characteristic and greater perception of community condemnation than only somewhat religious women (7). The main aims of pregnancy women should be regard to healthy position and furnish the course of pregnancy by protecting mother and fetus. The risk of future disease by spontaneous abortion is measured by body mass index (BMI) as a method for diagnostic persons. Higher BMI is associated with increased survival in adults (8). Individual characteristics effectiveness of rural pregnancy women on spontaneous abortion is guessed to be necessary due to a better delivery for rural pregnancy women circumstances. It is important to examine rural pregnancy women's individual characteristics effectiveness on spontaneous abortion, because they affect on life of women facing unwanted pregnancies (9). The purpose of present study was to determine effectiveness of the body mass index, age, length and overweight of rural pregnancy woman on spontaneous abortion during pregnancy in four villages of Sistan and Blouchestan in Iran.

### Materials and Methods:

Forty questionnaires by applying  $n = (Z_{1-\alpha/2} \times \sigma)^2 / (d)^2$  which  $Z_{1-\alpha/2} = 1.96$ ,  $\sigma = 3.25$  and  $d = 1$  with mean first of marriage 16.20±2.32 and

20.10±3.12 old years were provided to collect individual characteristic, pregnancy and spontaneous abortion of rural pregnancy women and a research as cross-sectional study between September 2012 and June 2013 by questionnaire in four villages with 5-10 family while they were coming to clinic was conducted in east-south in Iran, in four villages of two cities, Sarbaz (Sercum and Ckorkam villages) and Iranshahr (Karim abad and Baghda band villages) in Blouchestan. These four villages had differences in frequency of abrtin and characteristic of individuals. Some essential calculation was undertaken on rural pregnant women. The factors of body mass index (BMI), age of first marriage, age of first pregnancy, age of first delivery, length, weight and overweight were asked about rural pregnancy women in villages, and then, spontaneous abortion was compared with individual characteristics in four villages of lanshahr and Sarbaz city. The data was analyzed by using Student's T-tests, Chi-Square method, with statistically significant which was accepted  $p < 0.05$ , and 95% confidence interval (95%CI).

### Results:

Table1 showed spontaneous abortion cases in rural pregnancy women in villages of Iranshahr and Sarbaz city. Spontaneous abortion was zero for 7 pregnancy women; 6 pregnancy women for 1, 2, 3 pregnancy women for 1 in villages of Sarbaz city, but spontaneous abortion was not in villages of Iranshahr city. 35% of pregnancy women did not have any spontaneous abortion in villages of Sarbaz city and in 100 % of pregnancy women in the villages of Iranshahr city had not spontaneous abortion.

The resulting of analysis of the Body weight, length, body mass index (BMI), overweight, first age of marriage, first age of delivery and first age of pregnancy in four villages of two cities in Blouchestan in percent by Student's T-tests, Chi-Square method, with statistically significant effects which were accepted for  $p < 0.05$ , and 95% confidence interval (95%CI) was noted in table2. The mean of body weight and body mass index (BMI) were (54.35±8.74; 58.30±14.64) and (21.55±3.54; 25.01±6.12) in villages of Sarbaz city and in villages of Iranshahr city respectively. Body weight in villages of Sarbaz city was lower than in villages of Iranshahr city. First age of marriage, delivery and pregnancy as (16.50±2.33; 20.10±3.13; 17.50±2.54; 21.00±3.21); 24.80±7.06, 20.40±6.15 in villages of Sarbaz city and in villages of Iranshahr city were in table2 respectively.

The body mass index (BMI), age of first marriage, age of first pregnancy, age of first delivery, length, and highest body weight in rural pregnancy women, except weight factors in villages were effectiveness on

spontaneous abortion according to statistic method

**Discussion:**

Analysis of factors reveals that age in any stage is an effectiveness factor on spontaneous abortion. Based on comparing the rural pregnancy women data of villages and analysis of variance by statistical test, spontaneous abortion is attributed population characteristics of rural pregnancy women (16). Table 1 show that the spontaneous abortion is more in villages of Iranshahr city with occurring different cases, but there is not spontaneous abortion in villages of Sarbaz city at all. Because characteristics of pregnancy women in villages of Sarbaz is higher than villages in Iranshahr. In other word, pregnancy women in villages of Sarbaz have probably suitable biological factors. Women seek spontaneous abortion for reasons relate to their age status (10). All reproductive ages of women in villages of Iranshahr may useful and consist of simple explanations about methods of pregnancy preventive instead of spontaneous abortion for women, but women in villages of Iranshahr do not. Although youth age of women in villages of Sarbaz is a risk factor for termination of pregnancy, but they avoid doing spontaneous abortion (11). First age of marriage, first age of delivery and first age of pregnancy in villages of Sarbaz city is less than villages in Iranshahr city (table2). The differences in weight, length and BMI status of rural pregnancy women in the villages are also found to do spontaneous abortion. Over weight is related to obesity of rural preg-

nancy women. Obesity depends on length size and ages (17). When length size and ages are compared with weight in the rural pregnancy women, it reveals rural pregnancy women in villages of Iranshahr are small length with high age against their weight than in villages of Sarbaz city (18, 19, 21) (table2). Prospective studies mostly with European and North-American populations have shown inconsistent results regarding the association of overweight/obesity and mortality in adults (12). Results of studies about comparing overall obesity and body fat distribution with risk of mortality have varied considerably (20). The variation in physiology and expandability of regional adipose-tissue impacts spontaneous abortion; therefore, spontaneous of adiposity should consider it (13). Obesity may be produced by spontaneous abortion in rural pregnancy women (22). There are many factors to promote the spontaneous abortion (15). A researcher says that overweight and obesity are associated with disease in patients and are associated with increased mortality in any study (14).

**Conclusion:** The individual characteristics effectiveness of rural pregnancy women on spontaneous abortion can be used to evaluate interventions abortion programs. Individual characteristics reduces the spontaneous abortion by rural pregnancy women.

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**Table1- spontaneous Abortion frequency in villages of sarbaz (1) & Iranshahr (2)**

	Frequency of spontaneous abortion in pregnancy women of Villages in city (1)	Frequency spontaneous abortion of Villages in city (2)	Frequency of pregnancy women of Villages in city (2)
		.00	7
		1.00	6
		2.00	6
		3.00	1
	.00		
Total pregnancy women of Villages in city			
	20	20	20

**Table2- Statistic results of individual characteristic of rural pregnancy women in villages of Sarbaz (1) & Iranshahr (2) city**

	In Villages of city	N	Mean	Std. Deviation	Sig. (2-tailed)	95% Confidence Interval of the Difference	
						Lower	upper
First age of marriage	1	20	16.50	2.32	.000	-5.36	-1.83
	2	20	20.10	3.12	.000	-5.36	-1.83
First age of Pregnancy	1	15	17.20	2.54	.001	-5.99	-1.60
	2	14	21.00	3.21	.002	-6.02	-1.57
First Age of Delivery	1	20	24.80	7.06	.011	-9.83	-1.36
	2	20	30.40	6.15	.011	-9.84	-1.35
Weight	1	20	54.35	8.73	.304	-11.63	3.73
	2	20	58.30	14.54	.306	-11.68	3.78
Length	1	20	157.50	3.70	.001	2.33	7.92
	2	19	152.36	4.85	.001	2.30	7.95
BMI	1	20	21.55	3.54	.036	-6.68	-.23
	2	19	25.01	6.11	.040	-6.76	-.16
Average over weight	1	20	.69	.21	.000	-1.22	-.38
	2	20	1.50	.90	.001	-1.23	-.37

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