

*Original Article***The Relationship between Life Style and Individual Reproductively Characteristics of Pregnant Woman**

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**Abstract**

**BACKGROUND:** Life style is the collection of behaviors influenced by individuals' characteristics, social interactions and socio-economic situations. Since, pregnancy is a part of life it can change persons' life style. This study has tried to evaluate the relationship between life style and some characteristics of pregnant women.

**METHODS:** This study was an analytic cross sectional study. The data were collected by a questionnaire about different life style dimensions and some characteristics of pregnant women from 326 subjects referred to selected health and treatment centers of Shiraz in 2005. The data were analyzed by SPSS using t-test and Pearson correlation coefficient.

**RESULTS:** Findings of this study indicated the more acceptable life style was nutrition and the less acceptable was physical activity. There were significant relations ( $P < 0.01$ ) between pregnancy age and stress, parity and physical activity, education level and nutrition, with physical activity of studied population. Also there was a significant difference ( $P < 0.01$ ) concerning stress score in wanted and unwanted pregnancies, in dimension of stress and in dimension of nutrition and physical activity score in employed women and housewives ( $P < 0.01$ ).

**DISCUSSION:** Educating pregnant woman about control of stress, suitable social relations, secure sex activity and regular appropriate physical activities at the time of maternal care are necessary.

**KEY WORDS:** Life style, pregnancy, individuals' characteristics, pregnancy characteristics.

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Life style is a prevalent thesis for surveying how people live <sup>(1)</sup> and is influenced by individuals' characteristics, social interaction and life situation <sup>(2)</sup>. In the past decade, World Health Organization (WHO) emphasized on the importance of safe life style <sup>(3)</sup>. Initial discussions about life style concentrated on nutrition, exercise, smoking and drinking while today understanding of life style and its relation with health have changed.

So, one of the significant purposes of WHO until 2020 is promoting individual's healthy

life style and making all countries responsible to provide some effective strategies to improve individual and social life until 2020 as well as decreasing some harmful factors which threat health, such as improper physical activity, incorrect nutrition style, inadequate individual correlation, using narcotics and insecure sexual activities <sup>(4)</sup>. Having a special life style denotes choosing a set of informed or uninformed behaviors promote health status such as one inseparable parts of individuals' life style and determine their health <sup>(5)</sup>. Life style consists of

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various dimensions of life including nutrition, social relations, sexual and physical activities and stress (6). Stress can affect a person physically or mentally, so an adequate adaptation to stress is aspects of health life style (7). As pregnancy is a stressful period by itself so pregnant woman is more affected by different stresses of life. If a pregnant woman adapts herself quickly to them and be informed of different techniques facing stress, will take great care of herself and have more complete energy via stress full women (8).

The findings of other studies showed that psychological problems during pregnancy are one of the important predicting factors for birth weight and gestational age of infant (9). Pregnant women were always advised to obey a suitable nutrition method to increase their health status and decrease delivery with side effects (10). The studies showed improper diets, such as vegetarianism is accompanied with malabsorption of Fe, Ca and vitamins, low energy intake and fetal growth retardation (11).

Education level can also affect life style. In various studies the most unwell behaviors was related to young and low-educated mothers (12). Physical activity is another related factor to life style which promotes general and psychological health. Physical activities during pregnancy will result in well being and general health (13). Sexual activity is also considered as a part of life style. Sexual lust and activity in pregnant women and their husbands is unpredictable. Many physical, harmonic and socio- psychological factors influence on sexual lusts and response of pregnant women (14). Social relationship is another dimension of life style. Mutual effects of mother's characteristics and behaviors and insufficient support of social system may result in some fetal problems during pregnancy (8). The results of some studies showed that positive social relationships in pregnancy were accompanied with health promotion of pregnant women had more support and positive relation of their husbands have experienced less stress via who had inadequate social relationships (15). As individuals' behaviors which promote health and

improve socio- psychological behaviors determine their health situation (16); various studies have also proved some effective factors such as age and gestational age to appear some pregnancy problems and its relation with lifestyle (17).

In the past decades, WHO has greatly emphasized on the importance of healthy life style, so the aim of this study was to determine relationship between life style and some characteristics of pregnant women (age, gestational age, education, job and the number of previous pregnancies and being wanted or unwanted for the current pregnancy) referred to selected health and treatment centers of Shiraz in 2005.

## Methods

This was an analytic cross-sectional study. Sampling was done using cluster method and samples were consisted of 326 pregnant women referred to selected centers of health and treatment in Shiraz in 2005 and had follow up files. They desired to participate in this study and had enough time to answer the questionnaire of the study. Any kind of medical limitation (such as gastrointestinal, endocrinal and psychological diseases before pregnancy or severe pregnancy nausea or vomiting and multiparity) which causes changing in lifestyle was the criteria of excluding from study. Necessary information was gathered through two questionnaires; a 7-questioned questionnaire which involved age, pregnancy age, education, job, number of previous pregnancies and being wanted or unwanted for the current pregnancy; other questionnaire involved 35 questions about lifestyle consisted of five dimensions: nutrition (12 questions), stress (11 questions), physical activity (4 questions), social relationship (5 questions) and sexual activity (3 questions) were also filled. Likert's scoring system was used; grade 1 showed the most favorable and grade 5 the most unfavorable lifestyle related to each dimension. So, the highest score of lifestyle was 175 (unfavorable style) and the lowest one was 35 (favorable style). On the purpose of comparing score of each dimension with others, regarding that the number of questions related to different dimension of life

style were not the same, after computing the mean of raw scores in each dimension, this mean was divided on the number of questions in that dimension to obtain mean scores in Lickert criterion.

Content-validity of the questionnaire was assessed and reliability was estimated based on calculating Koronbach  $\alpha$  coefficient more than 70%. Data analysis was done using descriptive - inferential statistical methods (Pearson correlation coefficient, t-test) in SPSS statistical software. The rate of discrepancy in this study was considered 0.05.

## Results

Regarding the individual's pregnancy characteristics of examined cases, the findings of the study showed that 59.1 percent of samples were between 15-24 years old, 37 percent 25-34 and 3.9 percent 35 and higher. 14.1 percent were in first trimester of pregnancy, 36.2 percent in second and 49.7 percent in third. 33.7% were diploma, 49.1% graduated from high and elementary school, 8.3% had university education and 8.9 percent of them were illiterate. 93.9 percent were housewives and 6.1 percent were occupied. Wanted pregnancies were seen in 77.3 percent of cases when 22.7 percent were unwanted. Among studied women, 51.8 percent were uniparous and 48.2 percent were multiparous.

In case of determining life style in studied population the findings showed the most favorable life style among studied dimensions was related to nutrition with the mean of  $2.35 \pm 0.42$  and the most unfavorable life style was related to sexual activity with the mean of  $3.62 \pm 0.82$ . As getting the lower score in this study in each dimension indicated more favorability and vice versa, so studied population got low score in nutrition dimension, averaged score in stress and social dimension and high score in physical and sexual activity.

There was a positive significant correlation between gestational age and stress and also between parity and physical activity ( $P < 0.01$ ). So, higher gestational age was accompanied with more stress and higher number of parities

with less physical activity. The level of education and score of physical activity and nutrition score showed diverse significant correlation ( $P < 0.01$ ). In other words, higher educational level resulted in more favorability in nutrition and physical activity than other five dimensions. Also, the findings showed that women who had unwanted pregnancy experienced more stress than who had wanted pregnancy ( $P < 0.01$ ) and also physical activity and nutrition were more favorable for occupied pregnant women than housewives ( $P < 0.01$ ). Also, there was a negative significant relation between parity and the score of physical activity in examined samples meant higher parities resulted in less physical activity ( $r = 13\%$ ).

## Discussion

The results of the study showed nutrition is the most favorable dimension in the pregnant women's lifestyle, physical and sexual activities were the most unfavorable ones. In this case, the study of Gharaibeh et al emphasized that Jordanian pregnant women got an averaged score in nutrition dimension but low scores in physical activity and control of stress dimension. In his study getting higher score in each dimension considered as more favorable life style<sup>(18)</sup>.

The results of the study by Chen et al showed Taiwanese pregnant women had unfavorable nutrition style and averaged physical activity. It also showed a positive correlation between the level of education in pregnant women and their life style and also employed pregnant women who had graduated from high school had more favorable life style in the studied population<sup>(19)</sup>.

The study of Bond et al also demonstrated that Spanish pregnant women had an averaged nutrition and favorable physical activity, and their level of education and age had a direct relation with the scores of their life style, so higher education resulted in more progress of life style scores<sup>(20)</sup>; their findings were compatible with the result of our study. An arguable finding of this study was the positive relation of education with physical activity and

nutrition. Gained scores of nutrition dimension in Bond et al study did not show a significant correlation with level of education which opposed the results of this study. Also, in Bond et al study higher age in examined cases was accompanied with more favorable life style, while in this study no significant correlation between age and life style were observed. There was no correlation between scores of life style and parity in Bond et al study but in the present study a positive and significant correlation was seen between number of parities and the score of physical activity in studied cases.

Independent statistical t-test showed a significant difference between stress and wanted or unwanted pregnancy. Study of Saghafi et al has also showed stress in pregnant woman and her husband is one of the inevitable factors that are resulted from unwanted pregnancy (21). Glazier et al in their study demonstrated that women who had unwanted pregnancy experienced more stress than who had wanted pregnancy (6). Regarding the results of this study, it

may be concluded that the increase in the level of education causes an increase in physical activities, knowledge and follow by an adequate pattern of nutrition. Any way, training pregnant women in nutrition dimension by the personnel of health centers in routine pregnancy cares can be effective for a better nutritional pattern; But insufficient or unfitted training parallel with the culture of the studied society on the necessity of controlling stress, establishing proper social relations, having correct sexual activity; and doing regular and suitable physical activity can be resulted in unfavorable life style of pregnant women in two last dimension. So, it is suggested to establish some units in health centers to consult pregnant women about the quality of physical and sexual activity and control of stress during pregnancy to have safe lifestyle according to the characteristics and culture of the individual especially in women with unwanted pregnancy and housewives using some audiovisual tools, or preparing training booklets and pamphlets.

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