

## Socio-demographic and Lifestyle Factors in Breastfeeding Mothers, Referring to Isfahan Health Centers

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### Abstract

#### Background

The feeding importance of child in first two years of life and mental damage caused by malnutrition during this period is obvious. However the mother's lifestyle and long-term effects on the health of the mother and infant during breastfeeding period should not be neglected. Therefore, this study aimed to determine the relationship between the demographic characteristics and lifestyle of breastfeeding mothers referring to health centers in Isfahan.

#### Materials and Methods

In this cross-sectional study, 190 breastfeeding mothers were selected by quota sampling from Isfahan-Iran. Demographic and lifestyle questionnaires were completed. Data were analyzed by descriptive and analytical statistical methods using of SPSS-16.

#### Results

The majority of mothers (88.9%) in breast feeding period have an appropriate lifestyle. The most favorable conditions among different aspects of lifestyle related to spiritual health and the most unfavorable is related to sports and fitness. There was a direct and significant relationship between mother's education and prevention of accidents ( $r=0.34$ ,  $P<0.05$ ); father's education and social health ( $r=0.281$ ,  $P<0.05$ ) respectively. Results showed with increasing rank of birth, the avoiding of medications, drug and alcohol decreased; also with increasing duration of breastfeeding, prevention of accidents reduced ( $P<0.05$ ).

#### Conclusion

According of these findings, it seems that the pregnancy and postpartum period offers a perspective of opportunity to healthcare professionals to train and correct lifestyle and its different aspects of mothers in order to improve the health of the mother and infant.

**Key Words:** Breastfeeding, Individual Differences, Life style, Mothers.

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## 1-INTRODUCTION

Since the benefits of breastfeeding for infant and mother health and even society are well documented, WHO and UNICEF suggested initiation of breastfeeding within the first hour after the birth; exclusive breastfeeding for the first six months; and continued breastfeeding for two years or more (1, 2).

WHO remind with full confidence that breastfeeding reduces child mortality and has health benefits that extend into adulthood. Also breast milk is having several psychological and immunological advantages for reducing infant mortality. Statistics indicate breastfed children have at least six times greater chance of survival in the early months than non-breastfed children. An exclusively breastfed child is 14 times less likely to die in the first six months than a non-breastfed child, and breastfeeding drastically reduces deaths from acute respiratory infection and diarrhea, two major child killers. Studies indicate that breastfeeding helps improve mothers' health, as well as their children's. A woman grows both physically and emotionally from the relationship she forms with her baby (3, 4).

There are different factors affect in the time length of breastfeeding including mother education background, family income, family support, activities before birth, time of decision making for breast feeding, time of the first feeding (5).

Researches indicated the relation between continuity of breastfeeding with other factors of infants such as birth weight, infant gender, birth order and maternal factors like level of education, income, race, place of residence (Urban/Rural). In a way that the relation among the length of breastfeeding continuity with variables like higher birth weight, female gender, family first order and also mother higher level of education are significant and direct (6-9).

WHO have described healthy lifestyle as an attempt for achieving a complete physical, psychological and social welfare, lifestyle is relating to life daily patterns of an individual including type of nutrition and eating habit, the way of sending free times, smoking habit, exercise, stress and the way of using medical and health services which is done generally (10, 11).

By following an appropriate lifestyle, individual will consider suitable eating habit, regular exercise, avoid destructive behaviors and drugs, protection against incidents, on-time diagnosis of physical diseases, controlling emotions and thoughts, coping with stress and mental and psychological stress, independence, compatibility and modifying interpersonal relations in social aspect. One of the determined goals of WHO is to promote healthy lifestyle among individuals of society till 2020, based on this issue, countries must focus on strategies impacting on improving individual and social life (12, 13).

Research show that breastfeeding mother have higher score in quality of life and physical and psychological dimensions (14). Regarding the significance of breastfeeding for mother and child health and the role of lifestyle indicators for improving breastfeeding, the current study aimed to investigate the relationship between demographic characteristics and lifestyle of breastfeeding mothers in Isfahan- the Central of Iran.

## 2-MATERIALS AND METHODS

### 2-1. Study design and population

This cross-sectional study conducted on 190 women who were selected through quota sampling from health care centers of Isfahan in 2013. The sample size was determined based on previous studies (8, 9, 11). Inclusion criteria were: literacy, Iranian citizenship, breast-feeding to children less than two years of age, birth

weight of infant 2,500 to 4,000 grams, no known physical or mental illness in the mother or child and non-adopted children. Necessary explanations give and obtained a written consent from the qualified subjects.

## 2-2. Measuring tools

Data collection tools were: demographic information questionnaire and lifestyle questionnaire. Lifestyle questionnaire was taken from study of Lali et al. with permission, in mentioned study validity with content validity, factors analysis and convergent validity and reliability with Cronbach's alpha (0.76-0.89) and test-retest was measured (0.84-0.94)(11).

Lifestyle questionnaire is formed by 70 questions in Likert range in the form of always (3), usually (2), sometimes (1), and never (0). This questionnaire is consisting of 10 factors: physical health, sport and fitness, weight management and nutrition, prevention of diseases, psychological health, spiritual health, social health, avoiding medications, drugs and alcohol, prevention from incidents, and environmental health.

High scores in each one of the indicators and totally in the questionnaire indicates appropriate lifestyle in a way that if the obtained score was higher than 3, lifestyle is "*appropriate*" and if it was lower than 3, the lifestyle would be "*inappropriate*".

The research began after getting necessary permissions from School of Nursing and Midwifery, Isfahan University of Medical Sciences-Iran. After presenting the necessary explanations about research and asking for their consent, the questionnaires have been given to mothers in a calm and private environment and they have been guided to complete the questionnaires.

## 2-3. Data analyses

The collected data were analyzed by descriptive statistical methods (mean and

standard deviation), Pearson coefficient test, Spearman, ANOVA and t-test with using SPSS software version 16 and  $P < 0.05$  was considered significant.

## 3-RESULTS

Mean and standard deviation (SD) of mother and spouse age were  $29.05 \pm 4.752$  and  $32.66 \pm 5.068$  respectively. 81.6% of women were housewives, 44.2% of them having university educations. 55.3% of fathers were self-employment and 42.1% of them were having university degrees.

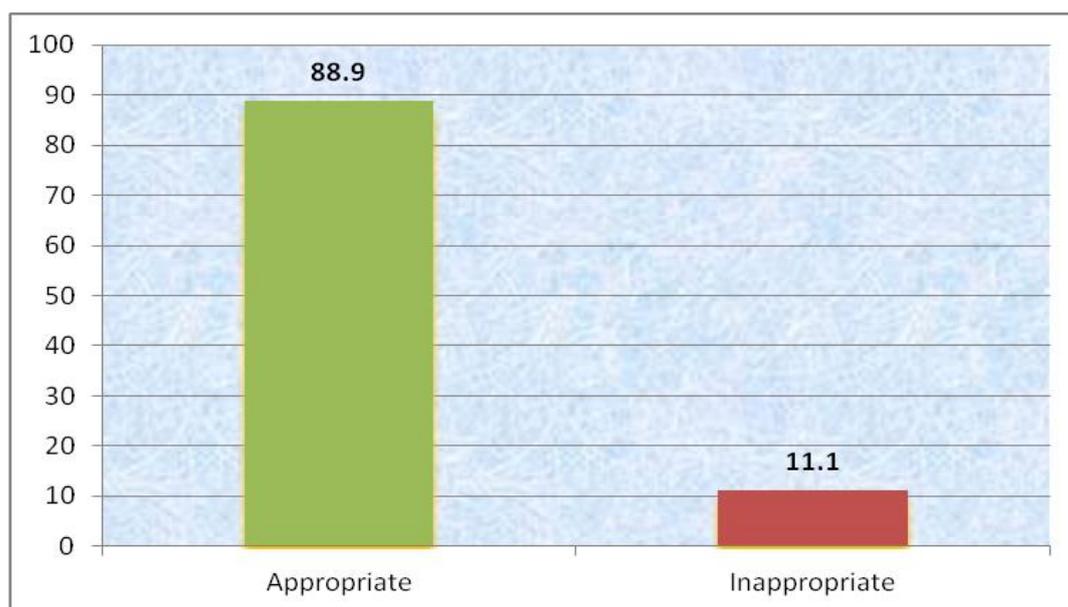
A total of 48% of infants were boy and 51.6% of them were girls. Deliveries were 38.9% natural and 61.9% cesarean.

Results showed that the most favorable conditions among different aspects of lifestyle related to spiritual health and the most unfavorable was related to sports and fitness (Table.1).

A total of 21(11.1%) of mothers had inappropriate lifestyle and 169 (88.9%) of them had appropriate lifestyle (Figure.1), and there was a direct and significant relationship between mother's education and prevention of accidents ( $r=0.34$ ,  $P<0.05$ ), and also, there was a significant relationship between father's education and social health respectively ( $r=0.281$ ,  $P<0.05$ ) (Table.2).

Results showed that there was a direct and significant relationship between rank of birth with sports and fitness( $r=0.299$ ), psychological health( $r=0.492$ ), weight management and nutrition( $r=0.356$ ), spiritual health( $r=0.446$ ), social health( $r=0.398$ ) and accident prevention( $r=0.203$ ) (Table.3); while, with increasing rank of birth, the avoiding of medications, drug and alcohol decreased( $r=-0.330$ ).

The results showed with increasing duration of breastfeeding, prevention of accidents was reduced( $r=-0.200$ ) (Table.4).



**Fig.1:** Frequency distribution of maternal total scores of lifestyle during breastfeeding

**Table 1:** The scores of different dimensions of lifestyle questionnaire during breastfeeding period

Variables	Mean $\pm$ SD
Physical health	3.04 $\pm$ (0.418)
Sports and fitness	2.46 $\pm$ (0.603)
Weight management and nutrition	3.18 $\pm$ (0.543)
Prevention of diseases	3.63 $\pm$ (0.346)
Psychological health	3.43 $\pm$ (0.531)
Spiritual health	3.69 $\pm$ (0.411)
Social health	3.46 $\pm$ (0.499)
Avoiding medications, drugs and alcohol	3.67 $\pm$ (0.676)
Prevention of accident	3.52 $\pm$ (0.525)
Environmental health	3.47 $\pm$ (0.528)

**Table 2:** The correlation between maternal education and father education with life-style factors

Variables	Correlation coefficient (P value )
Physical health	0.038 (0.781)
Sports and fitness	0.021 (0.768)
Weight management and nutrition	0.046 (0.673)
Prevention of diseases	0.022 (0.890)
Psychological health	0.065 (0.478)
Spiritual health	0.066 (0.474)
Social health	0.089 (0.324)
Avoiding medications, drugs and alcohol	0.100 (0.101)
Prevention of accident	0.34 (0.001)
Environmental health	0.022 (0.769)

Father education	Physical health	0.022 (0.766)
	Sports and fitness	0.031 (0.701)
	Weight management and nutrition	0.033 (0.647)
	Prevention of diseases	0.019 (0.879)
	Psychological health	0.097 (0.4339)
	Spiritual health	0.029 (0.743)
	Social health	0.281 (0.000)
	Avoiding medications, drugs and alcohol	0.012 (0.089)
	Prevention of accident	0.011 (0.901)
	Environmental health	0.348 (0.091)

**Table 3:** The correlation between rank of birth with life-style factors in participating mothers

Variables	Correlation coefficient (P-value)	
Rank of birth	Physical health	0.099 (0.087)
	Sports and fitness	0.299 (0.000)
	Weight management and nutrition	0.356 (0.000)
	Prevention of diseases	-0.019 (0.835)
	Psychological health	0.492 (0.000)
	Spiritual health	0.446 (0.000)
	Social health	0.398 (0.000)
	Avoiding medications, drugs and alcohol	-0.330 (0.000)
	Prevention of accident	0.203 (0.005)
	Environmental health	0.156 (0.301)

**Table 4:** The correlation between duration of breastfeeding with life-style factors in participating mothers

Variables	correlation coefficient (P-value)	
Duration of breastfeeding	Physical health	0.080 (0.277)
	Sports and fitness	0.028 (0.705)
	Weight management and nutrition	0.009 (0.657)
	Prevention of diseases	-0.019 (0.155)
	Psychological health	-0.508 (0.430)
	Spiritual health	0.047 (0.530)
	Social health	-0.052 (0.477)
	Avoiding medications, drugs and alcohol	-0.076 (0.294)
	Prevention of accident	-0.200 (0.006)
	Environmental health	-0.025 (0.731)

#### 4-DISCUSSION

The results of this study show that the majority of mothers in breastfeeding period had an appropriate lifestyle; so, in total, 88.9% of mothers had appropriate lifestyle. The most favorable conditions among different aspects of lifestyle related to spiritual health that the high scores of spiritual aspect among other lifestyle aspects, regarding to Islamic being of Iran and people's spiritual beliefs, it is not an unexpected result. Other studies showed that spiritual had a positive role on physical and mental health of people and can provide promotion and improvement of lifestyle for individuals (15, 16).

The most unfavorable was related to sports and fitness. In this study, low score of sport and fitness maybe due to lack of access to an appropriate place, facilities and appropriate equipment for exercise and can be maybe due to the culture of society which woman lived. Studies reported the main reasons for lack of exercise in women after delivery can be due to lack enough time, importance lack for exercise and lack of space for women exercise and child care issues as barriers to physical activity (10, 17).

This study show there was a direct and significant relationship between mother's education and prevention of accidents and also, between husband's education and social health. Research reported socioeconomic level and education of mother affects on lifestyles and behaviors of mothers during breastfeeding (19).

Studies reported the knowledge, ignorance, undesirable sociocultural beliefs and misconceptions prevailing in the community, influence breastfeeding behavior of mothers or even cause the cessation of breastfeeding by the mothers. Nurses as health professional play an important role in training correct behaviour and changing attitudes and lifestyles in breastfeeding mothers (19-21).

#### 5-CONCLUSION

Although many of demographic characteristics of breastfeeding mother (such as rank of birth, education and socioeconomic level of mother) that effect on her lifestyle cannot be changed, but the pregnancy and postpartum period offers a window of opportunity to healthcare professionals to train and give information and correct lifestyle and its different aspects of mothers in order to improve the health of the mother and infant.

**6-CONFLICT OF INTERESTS:** None.

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