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Quality of life in pregnant women in Bandar Abbas, South, Iran

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ABSTRACT

During pregnancy, large changes occur in biochemical, physiological and anatomical female body. These changes are outside the control of pregnant women and they are vulnerable physically and emotionally. The present study designed to assess quality of life and related factors in pregnant women. This Cross- sectional study conducted on 400 pregnant women referred to health centers and clinics Obstetricians and Gynecologists in city Bandar Abbas, south Iran. Data collected using questionnaires Brief sf-36. The collected data analyzed by SPSS software 19 and descriptive and inferential test. The mean of the quality of life total score in pregnant women was 58.2. Based on the results, Among the 8 dimensions of quality of life, mental health and social functioning, the mean 71.11 and 69.28 had the highest score respectively. Dimensions physical and emotional health problems with respectively the mean 32.49 and 48.78 had the lowest score. The mean quality of life score between the age groups (*P =0.03*), the degree of economic satisfaction (*P=0.00*) and wife partnership satisfaction in housework (*P=0.002*) has a significant relationship and at rest the relationship was not significant. There were significant differences between different age groups, in dimensions of social functioning (*P=0.00*), bodily pain (*P=0.01*) vitality (*P=0.00*) and physical problems (*P=0.04*). Between the different levels of economic satisfaction were significant differences in the mean dimensions score of bodily pain (*p=0.003*), public health (*P=0.00*), vitality (*P=0.00*), Social functioning, (*P=0.00*), emotional health problems (*P=0.00*), and mental health (*P=0.00*). This study showed that the effect of some variables in pregnant women reduces their quality of life, attention to these variables and planning to reduce the impact of these variables during pregnancy will improve the quality of life of pregnant women.

Key words: quality of life, pregnant women, Sf-36

1. INTRODUCTION

Pregnancy is one of the most significant events that can occur in a women's life and is often considered to be a time of excitement, expectancy and change. During pregnancy, women have to deal with many physical, chemical changes in their body. Pregnancy also brings changes in the endocrine system and bodily organs (1). As substantial changes in the woman's physical and mental health can be upsetting and can have negative effects on the pregnant woman's mental health (2). For many women, mental health issues may arise during pregnancy (3-5). Some of the physical symptoms of pregnancy are nausea, hemorrhoids, backache, oral pain and shortness of breath (6). Quality of life is an important indicator and includes several aspects such as physiological and functional aspects (7). Numerous studies have documented significant elevations in psychological symptoms during pregnancy, including depression and anxiety (8,9). Even in uncomplicated pregnancies, the physical and emotional changes that accompany pregnancy can alter women's ability to function in their various roles, ultimately influencing their quality of life (10,11). Health-related quality of life (HRQOL) is a multidimensional concept used in public health to refer to a person or group perceiving physical and mental health status over time (12). Despite the fact that, the quality of life plays a significant role in the health of pregnant women, HRQOL assesses areas of physical functioning (the ability to perform physical activities), psychological well-being, subjective symptoms (such as bodily pain and fatigue), social and cognitive functioning (13). Very little research has been

conducted on the quality of life in Iranian women, thus research in this field is essential. This study aimed to survey quality of life among pregnant women referred to urban health centers, and private offices, in Bandar Abbas, South of Iran.

2. MATERIALS AND METHODS

This cross-sectional study was conducted on 400 pregnant women referred to health centers and Gynecologists office of Bandar Abbas, south Iran. For this purpose of study cluster, random sampling method was used. Of all the health, centers only eight selected in the city of Bandar Abbas and than 25 samples randomly taken from each health center (200 samples). The number 8 office Obstetricians and Gynecologists officer randomly selected, then 25 samples taken from each office (200 samples). The data collection tool was a questionnaire in short form (13). After obtaining informed consent, eligible women announce their readiness; questionnaires completed by interviewing the participants. Questionnaire SF-36 assesses the following eight dimensions: physical functioning, role limitation from physical health problems, bodily pain, general health, vitality, social functioning, role limitation from emotional health problems, and mental health. The total score has been allocated from zero to one hundred. The higher the score represents better health status. Questionnaire in short form (13) was an international standard questionnaire and the reliability and validity of the Persian version has been confirmed (11). Data was recorded in SPSS software version 19. By applying descriptive statistics, independent t-test, chi-square and ANOVA the statistical portion was analyzed.

3. RESULTS AND DISCUSSION

In this study, quality of life was evaluated in 400 pregnant women in Bandar Abbas. The mean age of people was 26±5.33 and most of the pregnant women were expecting for the first time. The majorities of women were homemakers and wanted Pregnancy. Education levels of most of the people (49.2 %) were high school diploma. The mean score quality of life in pregnant women was 58.2±14.89. Based on the results among the eight domains of quality of life, mental health and social functioning were, respectively, with an average of 71/11 and highest scores 69/28. Aspects of physical and emotional health problems, respectively, with mean 32/49 and had the lowest score 48/78 (Table 1).

Table 1: Mean and standard deviation of quality of life in pregnant women

Dimensions Of Quality Of Life	*Mean*	*Standard Deviation*
physical functioning	58.33	24.11
role limitation from physical health problems	32.49	32.64
bodily pain	65.25	25.10
general health	65.4	17.64
vitality	54.84	18.44
social functioning	69.28	22.96
role limitation from emotional health problems	48.78	43.83
mental health	71.11	18.26

The relationship between quality of life in pregnant women with age, employment status, wanted or unwanted pregnancy, gestational age, education, economic satisfaction and satisfaction with co-participation of the wife in household work presented in Table 2.

Table 2: Distribution of mean and standard deviation total score based on demographic quality of life for pregnant women

Demographic		Quality of life		
		Mean	SD	P-value
Age	16-20	60.77	14.28	0.03
	21-25	58.48	14.78	
	26-30	55.96	13.78	
	31-35	55.72	15.05	
	>35	64.26	18.37	
Employment Status	Housekeeper	57.65	14.47	0.08
	Employed	61.14	16.80	
Wanted And Unwanted Pregnancy	wanted	58.53	14.92	0.2
	unwanted	56.23	14.69	
Age pregnancy	First trimester	58.26	16.73	0.9
	Second trimester	58.40	14.60	
	Third trimester	57.96	14.41	
Education	Less than high school diploma	59.8	16.22	0.1
	Diploma	56.79	13.52	
	Academic degree	59.90	15.96	
Economic Satisfaction	Completely dissatisfied	47.65	5.38	0.00
	Dissatisfied	53.80	13.23	
	Satisfied	59.08	14.46	
	Completely satisfied	62.65	16.66	
Satisfaction With Participation Of The Wife In Household Work	Completely dissatisfied	55.31	12.39	0.002
	Dissatisfied	53.67	14.57	
	Satisfied	57.21	13.10	
	Completely satisfied	61.81	16.59	

The results of this study showed a significant relationship between quality of life with age, economic satisfaction and satisfaction with the level of participation of wife in household work. Different aspects of quality of life according age showed significant differences between social functioning, bodily pain, vitality and health problems among different age groups. However, there was no significant difference between the dimensions of

physical functioning, emotional problems, general and mental health among different age groups (Table 3**).**

Table 3. Mean quality of life according to age groups

Age	*16-20*		*21-25*		*26-30*		*31-35*		*>35*		*P-value*
	(n =71)		(n =141)		(n =99)		(n =63)		(n =26)		
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Quality Of Life											
Physical Functioning	61.90	19.47	58.92	23.78	56.29	26.23	55.47	23.17	60	30.78	0.5
Role Limitation From Physical Health Problems	33.09	31.84	37.68	35.89	25	28.57	30.15	30.17	37.5	33.35	0.04
Bodily Pain	68.59	24.86	65	24.21	63.63	25.23	59	26.66	78.84	21.32	0.01
General Health	62.18	18.77	65.46	18	64.34	14.97	67.93	18.5	71.73	14.82	0.1
Vitality	60.75	19.68	52.34	18	53.18	15.91	51.74	17.82	66.15	21.08	0.00
Social Functioning	74.11	23.93	65.51	23.52	68.05	22.31	67.85	22.19	84.61	11.88	0.001
Role Limitation From Emotional Health Problems	52.58	45.30	51.93	42.05	45.11	43.98	41.79	45.97	52.56	43.38	0.4
Mental Health	73.978	16.68	69.02	19.59	71.34	16.62	69.96	20.34	76.57	14.12	0.1

Results shows that it has a significant difference between the different levels of economic satisfaction along with the mean score of dimensions of physical pain, general health, vitality, social functioning, role limitation from physical and emotional health problems (Table 4).

Table 4. Mean quality of life based on economic satisfaction

Economic satisfaction	*Completely Dissatisfied*	*Dissatisfied*	*Satisfied*	*Completely satisfied*	*P-value*
	(n=7)	(n=91)	(n=223)	(n=71)	

Quality of life	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Physical Functioning	50.71	41.87	60.23	22.47	51.91	29.39	60.7	25.5	0.6
Role Limitation From Physical Health Problems	35.71	24.39	25.85	34.83	32.84	31.39	38.73	32.40	0.09
Bodily Pain	50.71	8.74	61.04	27.75	69.37	23.76	60.25	24.82	0.003
General Health	43.57	6.26	60.71	15.80	65.51	16.56	72.54	18.67	0.00
Vitality	44.28	7.31	48.46	14.78	56.20	17.72	59.81	22.96	0.00
Social Functioning	57.14	12.19	62.77	18.90	73.93	22.34	66.37	26.44	0.00
Role Limitation From Emotional Health Problems	70.42	35.63	36.36	40.63	50.82	45.38	53.52	40.82	0.01
Mental Health	39.2	48.19	62.57	16.72	71.45	16.62	82.46	14.03	0.00

In this study, the mean score of quality of life in pregnant women was 58.2 ± 14.58. In a survey conducted by Abbaszadeh the mean score of quality of life was 61.1± 13.2 and in another study in Kashan it was 62.8 ± 12.4 (14). Epidemiological studies from various cultures Canada (17), Switzerland (18), and Singapore (19), particularly in relation to physical health (2, 17) have suggested that pregnancy is associated with significant impairments in health related quality of life (HRQOL) (2, 11, 15, 16). The current findings indicate that the lowest score of quality of life was related to dimensions of physical, mental and emotional problems. A survey conducted by Otchet and colleagues showed that pregnant women encounter severe body pain and it is a major limitation caused due to weak health (17). A study conducted by Hueston showed that during pregnancy, bodily pain increases, physical functioning gets weaker and functional limitations intensify due to physical problems (10). Among the eight dimensions of quality of life in this, study similar to the study of Abbaszadeh highest mean score allied to mental health and social functioning. The mean scores in mental health and social functioning was higher than the mean scores of quality of life in study Abbaszadeh. The variables of present study of maternal age and satisfaction of economic status had a significant impact on quality of life in pregnant women, which agrees with the study of Abbaszadeh (14). Even though in this study, there was no statistical significance between gestational age and quality of life. Nevertheless, Hueston and Li concluded in their study that the mean score quality of life decreased with advancing gestational (10,20). Decreased quality of life in pregnant women approaching the end of pregnancy can indicate that the health of the mother in the final months of pregnancy will be more sensitive and needs special care. There was no significant Relationship between the job and the quality of life for pregnant women. Moreover, Hueston found that job has modest impact on quality of life (10). The reason for this discrepancy is probably, limited number of employed pregnant women (15.75 percent) in this survey. The results showed that quality of life scores in women with wanted pregnancy is higher compared to women with unwanted pregnancy. Although the exact determination of the variables of quality of life scores in different dimensions, which compels larger sample size. The findings of the study showed people who have unwanted pregnancies, 20/5 times more likely to have a lower quality of life, which is consistent with the present study (14). Incidence of unwanted pregnancies is one of the most important indicators to evaluate the quality of family planning services. Reproductive health influences in all aspects as in, physical, mental and social. According to the available evidence, among women who have an unwanted pregnancy are more common to have mental disorders and social problems, which will reduce the quality of life and mental health (21). Therefore, careful planning of health is necessary to reduce the effect of these

variables and it is essential in improving the quality of life during pregnancy. In the present study, although there was no statistical association between level of education and quality of life, but women with higher education had higher quality of life. Many studies showed, educational impact on quality of life rises with higher levels of education compared to age (21), as higher levels of education enables a woman to acquire more knowledge in coping up with distress (20). The findings of studies illustrate that higher education leads to satisfaction and joy in life (21).

4. CONCLUSION

This study showed that the quality of life is low in pregnant women and some variables, reducing the quality of life in pregnant women. Development to reduce the impact of these variables can improve the quality of life during pregnancy. Prevention and treatment of physical complications such as nausea, back pain, leg cramps and vomiting leads to improved physical dimensions and will aid pregnant women. It is recommended that retraining programs conducted by health workers will boost the quality of health care in the community.

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AUTHORS CONTRIBUTION

This work was carried out in collaboration between all authors.

CONFLICT OF INTEREST

The authors have declared no potential conflicts of interests with respect to the authorship and/or publication of this article.

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