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ORIGINAL ARTICLE

Assessment of Quality of Life, Self-Esteem and Body Image Perception According to Marital Status in Employed Women

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ABSTRACT

Background: Women feel under pressure because of marriage issues that affect their lives. Marriage and divorce are important events that change people's lives affecting their health, economic condition and well-being in addition to reflecting social and cultural concerns in Eastern Arab societies. The objectives of the study are to assess the quality of life (QoL), self-esteem and body image perception (BIP) according to marital status in employed women in Zagazig University.

Methods: A cross-sectional study was performed including 216 employed women in administrative departments in faculties of Zagazig University. A structured Arabic questionnaire was used consisting of four parts: Sociodemographic data, quality of life using Arabic version of (WHOQOL-BREF) questionnaire, women self-Esteem using Rosenberg Self-esteem Scale (RSS), BIP, and body image satisfaction using modified body image figure scale adapted from (Stunkard Figure Rating Scale).

Results: Regarding QoL, 62.1% of married women had moderate QoL, while 47.2% of single women had high self-esteem, 76% of divorced women correctly estimated their body images and 30.6% of single women were satisfied with their body images. There was a substantial relationship between self-esteem and QoL for different marital status except in divorced women. There was a remarkable association between BIP and QoL in widow women ($r=-0.531$, $p\text{-value}=0.041$). There was a significant link between body image satisfaction and QoL in single and divorced women ($r=0.438$ & 0.404 , $p\text{-value}=0.007$ & 0.045) respectively.

Conclusion: Quality of life is affected by marital status, while self-esteem and body image perception are not affected by marital status of employed women.

Keywords: Marital Status, QoL; Self-esteem; Body image perception

INTRODUCTION

In Eastern Arab societies, women feel under pressure because of marriage issues that affect their lives. Marriage and divorce are important events that change people's lives affecting their health, economic condition and well-being in addition to reflecting social and cultural concerns of each community and country [1].

Eventually the trends in marital status among the Egyptians are changing rapidly represented by a decrease in marriage rate as it changes to 9/1000 in 2022 compared to 2012 it was 11.2/1000, an increase of divorce rate as it changes to 2.6/1000 in 2022 compared to 2012 it was 1.9/1000 and raising

in average age of first marriage as it increased to 25.1 years in 2022 compared to 2010 it was 23.8 years according to official statistics [2].

Marriage is the most important relationship between two individuals. It is one of many life experience domains that greatly affects quality of life (QoL). World Health Organization (WHO) has defined QoL as "The person's perspective of their situation in life in regard to the value and cultural frameworks in which they live, as well as their objectives, standards, expectations, and worries" [3].

Self-esteem means a negative or positive attitude regarding the self. It doesn't only reveal one's

abilities, talents or others' evaluation but it widely reflects the "feeling that one is 'good enough'" [4]. Body image is a complicated concept of the self that is made up of how we see and feel our bodies physically, mentally and emotionally. Also, Grogan described body image as "the individual's feelings, perceptions, and thoughts regarding his or her body" [5].

Body image (BIP) is affected by many factors such as psychological, socio-cultural such as family, the mass media and peers. Body dissatisfaction negatively affects physical and psychological health including depression, eating disorders and low self-esteem [6].

Most of the studies done show how sociodemographic and socioeconomic conditions affect quality of life, self-esteem and BIP in general but few of them focus on how marital status specifically affects them, especially in case of sudden current changes in our society

The present work aims for improving quality of life of employed women in Egypt.

METHODS

A cross-sectional study involved 216 employed women in administrative departments in faculties of Zagazig University (Faculties of Medicine, Pharmacy, Dentistry, Science, Nursing, Physical Education for Girls, and Faculty of Technology and Development), Sharkia Governorate. The fieldwork was done between November 2023 to February 2024. Multistage sampling method was used, 1st stage using simple random sampling technique in selecting the faculties and 2nd stage using cluster sampling technique including employed women. An informed consent was obtained from study participants after explanation the purpose and objectives of the study.

All employed women with age between 35 – 45 years old were included. Teaching staff and presence of concomitant illness (physical or psychological) were excluded.

The sample size was calculated by Open Epi program concerning the total number of employed women within age 35 – 45 years old in administrative departments in Zagazig University is 1475 employed women, the proportion of females who were satisfied with their current body size was 20.8% [7]. At confidence level 95%, the sample size was measured to be 216 employed women.

Data collection tools

The data were collected through a structured Arabic questionnaire within 10-15 minutes to be completed consisting of four parts:

First part

Sociodemographic data to assess sociodemographic characteristics including personal variables, single women were asked about living status and underlying causes of delayed marriage. Married women were asked about having children or not and about husband (education, work, and income). Divorced women were asked about having children or not and leading causes of divorce. Ex-husbands (education, work and income). Regret the occurrence of divorce (Yes or No). Widowed women were asked about having children or not.

Second part (QoL):

WHO QoL questionnaire, short version (WHOQOL-BREF) was developed by the WHO-QOL group [8]. The Arabic version of the (WHOQOL-BREF) questionnaire was used and shown to be valid and dependable within Arabic-speaking persons [9].

The Arabic version's reliability was examined by Cronbach's α coefficient, which was 0.867 for the entire questionnaire, and its reliability was assessed using factor analysis employing the Kaiser-Meyer-Olkin test, which was 0.911. The WHOQOL-BREF tool is a self-administered 26-items questionnaire according to Malibary et al. [10].

The scoring system was that each question was assessed on a 5-point Likert scale ranging from 1 (very dissatisfied / very poor / never /none) to 5 (very satisfied / very good / always /extremely), and the results from all four categories were added together and graded in an upward direction, with greater scores representing better QoL. The total number of responses on each subsection yields a score for overall QOL. Raw scores of 2 separate items and 4 categories were determined by summing the scores of individual items and converted on a scale that ranges 0-100, where 0 is the least and 100 is the greatest QOL [11]. The interpretations of the final scores for the total scale and for subscales were classified into poor or bad ≤ 45 , moderate 46 – 65, relatively high > 65 according to Bani-Issa [12].

Third part

Self-esteem questionnaire using Rosenberg Self-esteem Scale (RSS): This scale adopted from Rosenberg [13]. It is a self-reporting questionnaire assessing self-esteem by assessing both negative and positive feelings about the self. The Arabic

version of RSS was reliable and valid in Arabic language [14]. The scale consists of 10 items and has been scored from 10 – 40 classified as low 10 – 25, medium 26 – 29, high 30 – 40, according to García et al. [15].

Fourth part

BIP and body image Satisfaction (BIS): according to modified body image figure scale adapted from (Stunkard Figure Rating Scale) that has good overall validity and test-retest reliability which represents nine female schematic figures ranging from extreme thinness to extreme obesity [16].

The BMI and figure scale categories were compared to assess Body Image Perception by subtracting the code representing estimated BMI from code representing “perceived” current figure. The “perceived” and “ideal” figures were compared with each other to assess Body Image Satisfaction. The “ideal” figure’s number was subtracted from “perceived” current figure’s number [17].

Statistical analysis

The data were analyzed utilizing SPSS program version 27.0. Qualitative data were presented as frequencies and relative percentages. Quantitative data were expressed as mean (\bar{x}) ± SD. ANOVA test was used to calculate the difference between more than 2 groups. Chi square test (χ^2) was employed to test the significant difference in qualitative variables. The Pearson correlation test was used to test significant linear relations between numeric variables. The results were significant when P value <0.05.

Ethical considerations

An informed consent was obtained from studied participants and approved by the Institutional Review Board (IRB) of Faculty of Medicine, Zagazig University. (ZU-IRB #10499).

RESULTS:

The age of employed women ranges from 35-45 years, education years ranges from 15-22 years, experience years ranges from 4-24 years. The

differences were not significant in age, years of education, years of experience, residence, per-capita income, body mass index of employed women regarding their marital status ($P \geq 0.05$). (Table 1)

More than half of employed women (58.8%) had moderate QoL, 31.9% had relatively high QoL and only 9.5% had poor QoL. (Figure1)

There were significant differences in physical health and social relationships domains among women. Single women had highest physical health domain scores compared to married, divorced and widow women. While married women had the highest social relationships domain scores compared to single, divorced and widow women ($P \geq 0.05$). (Table 2)

There were no variations in self-esteem and body image perception among the studied groups. While body image satisfaction was significant for marital status of employed women ($P = 0.025$) as single women were more satisfied with their current body images compared to married, divorced and widow women. (Table 3)

There was a significant association between QoL, self-esteem and BIS among employed women ($r = 0.411 \& 0.161$, $p < 0.001 \& 0.018$) respectively. (Table 4)

Concerning single women, there was a significant relationship between QoL, self-esteem and BIS ($r = 0.629 \& 0.438$, $p < 0.001 \& 0.007$) respectively. Whereas there was a link between self-esteem and BIS ($r = 0.343$, $p = 0.041$). Regarding married women, there was a significant association between QoL and self-esteem ($r = 0.408$, $p < 0.001$). (Table 5)

Regarding divorced women, there was a significant association between QoL and body image satisfaction ($r = 0.404$, $p = 0.045$). While for widow women, there was a significant relationship between QoL, self-esteem and BIP ($r = 0.536 \& 0.531$, $p = 0.039 \& 0.041$) respectively. Whereas there was a significant link between BIS and the age of widow women ($r = 0.531$, $p = 0.042$). (Table 6)

Table 1: Comparison of sociodemographic characteristics of studied employed women according to their marital status (n=216):

Variables	Single n=36	Married n=140	Divorced n=25	Widow n=15	F	P-value
Age (years)						
Mean ± SD	39.9±2.58	39.9±3.54	41±3.81	41.3±3.02	1.405	0.242
Range	35-45	35-45	35-45	36-45		

Variables	Single n=36	Married n=140	Divorced n=25	Widow n=15	F	P-value
Years of education Mean ± SD Range	17.7±1.6 15-22	17±1.74 15-22	17.2±1.9 15-21	16.7±1.15 15-19	1.943	0.124
Years of experience Mean ± SD Range	15±3.25 6-23	16.3±4.9 4-24	15.9±4.4 5-22	17.4±3.2 10-21	1.235	0.297
Residence -Urban -Rural	27(75.0) 9(25.0)	87(62.1) 53(37.9)	16(64.0) 9(36.0)	12(80.0) 3(20.0)	3.563	0.313
Per-capita income -Enough and saving -Enough only -Not enough	1(2.8) 19(52.8) 16(44.4)	12(8.6) 76(54.3) 52(37.1)	1(4.0) 12(48.0) 12(48.0)	0(0) 12(80.0) 3(20.0)	7.205	0.302
Body Mass Index -Normal weight -Overweight -Obese	12(33.3) 17(47.2) 7(19.5)	28(20.0) 53(37.9) 59(42.1)	4(16.0) 9(36.0) 12(48.0)	2(13.3) 5(33.3) 8(53.4)	9.241	0.1604
Physical activity -Yes -No	14(38.9) 22(61.1)	39(27.9) 101(72.1)	4(16.0) 21(84.0)	7(46.7) 8(53.3)	6.007	0.111
Hobbies -Yes -No	15(41.7) 21(58.3)	39(27.9) 101(72.1)	8(32.0) 17(68.0)	4(26.7) 11(73.3)	2.706	0.439
χ^2 , Pearson's chi-squared test *Significant, p-value < 0.05 Not significant, p-value ≥ 0.05						

Table 2: Association between marital status of employed women and QoL and its domains

Variables	Single n=36	Married n=140	Divorced n=25	Widow n=36	χ^2	P-value
	No. (%)	No. (%)	No. (%)	No. (%)		
Physical health domain -poor -moderate -relatively high	4(11.1) 8(22.2) 24(66.7)	32(22.9) 63(45.0) 45(32.1)	11(44.0) 5(20.0) 9(36.0)	3(20.0) 8(53.3) 4(26.7)	23.625	<0.001*
Social relationships domain -poor -moderate -relatively high	7(19.4) 16(44.5) 13(36.1)	8(5.7) 16(11.4) 116(82.9)	3(12.0) 9(36.0) 13(52.0)	2(13.3) 5(33.3) 8(53.4)	36.466	<0.001*
Psychological health domain -poor -moderate -relatively high	9(25.0) 12(33.3) 15(41.7)	28(20.0) 71(50.7) 41(29.3)	5(20.0) 8(32.0) 12(48.0)	3(20.0) 7(46.7) 5(33.3)	6.377	0.382
Environment domain -poor -moderate -relatively high	12(33.3) 19(52.8) 5(13.9)	47(33.6) 75(53.6) 18(12.8)	7(28.0) 15(60.0) 3(12.0)	7(46.7) 7(46.7) 1(6.6)	1.800	0.937
QOL -poor -moderate -relatively high	4(11.1) 21(58.3) 11(30.6)	9(6.4) 87(62.1) 44(31.5)	5(20.0) 10(40.0) 10(40.0)	2(13.3) 9(60.0) 4(26.7)	7.175	0.305

χ^2 , Pearson's chi-squared test *Significant, p-value < 0.05 Not significant, p-value ≥ 0.05

Table 3: Association between marital status of employed women and self-esteem, body image perception, and satisfaction

Variables	Single n=36	Married n=140	Divorced n=25	Widow n=36	X ²	P-value
	No. (%)	No. (%)	No. (%)	No. (%)		
Self-esteem						
-low	7(19.5)	16(11.4)	1(4.0)	2(13.3)	7.109	0.311
-medium	12(33.3)	62(44.3)	16(64.0)	7(46.7)		
-high	17(47.2)	62(44.3)	8(32.0)	6(40.0)		
Body image perception						
-Underestimation	14(38.9)	46(32.9)	4(16.0)	9(60.0)	9.058	0.170
-Correct estimation	20(55.6)	82(58.5)	19(76.0)	5(33.3)		
-Overestimation	2(5.5)	12(8.6)	2(8.0)	1(6.7)		
Body image satisfaction						
-Satisfied	11(30.6)	29(20.7)	2(8.0)	2(13.3)	14.48	0.025*
-Wish to lose weight	19(52.7)	105(75.0)	22(88.0)	11(73.4)		
-Wish to gain weight	6(16.7)	6(4.3)	1(4.0)	2(13.3)		

X², Pearson’s chi-squared test *Significant, p-value < 0.05

Table 4: Correlation between all employed women’ age, QoL and its domains, self-esteem, body image perception and body image satisfaction

Variables	QoL		Self-esteem		Body image perception		Body image satisfaction	
	r	P-value	r	P-value	r	P-value	r	P-value
Age	0.006	0.927	0.002	0.979	-0.097	0.155	-0.010	0.884
QoL	1		0.411	<0.001*	-0.092	0.176	0.161	0.018*
Self-esteem	0.411	<0.001*	1		0.066	0.332	0.095	0.164
Body image perception	-0.092	0.176	0.066	0.332	1		-0.023	0.737
Body image satisfaction	0.161	0.018*	0.095	0.164	-0.023	0.737	1	

r, Pearson’s correlation test *Significant, p-value < 0.05

Table 5: Correlation between single and married women’ age, QoL and its domains, self-esteem, body image perception and body image satisfaction:

Variables	QoL		Self-esteem		Body image perception		Body image satisfaction	
	r	P-value	r	P-value	r	P-value	r	P-value
Single women								
Age	0.284	0.093	-0.037	0.832	-0.139	0.420	-0.014	0.936
QoL	1		0.629	<0.001*	-0.018	0.919	0.438	0.007*
Self-esteem	0.629	<0.001*	1		0.175	0.306	0.343	0.041*
Body image perception	-0.018	0.919	0.175	0.306	1		0.191	0.265
Body image satisfaction	0.439	0.007*	0.343	0.041*	0.191	0.265	1	
Married women								
Age	0.060	0.483	0.027	0.748	-0.109	0.200	0.016	0.849
QoL	1		0.408	<0.001*	-0.068	0.425	0.026	0.756
Self-esteem	0.408	<0.001*	1		-0.112	0.186	-0.035	0.679
Body image perception	-0.068	0.425	-0.112	0.186	1		-0.137	0.106
Body image satisfaction	0.026	0.756	-0.035	0.679	-0.137	0.106	1	

r, Pearson’s correlation test *Significant, p-value < 0.05

Table 6: Correlation between single and married women’ age, QoL and its domains, self-esteem, body image perception and body image satisfaction:

Variables	QoL		Self-esteem		Body image perception		Body image satisfaction	
	r	P-value	r	P-value	r	P-value	r	P-value
Divorced women								
Age	-0.149	0.476	-0.029	0.890	0.018	0.933	-0.299	0.146
QoL	1		-0.085	0.686	-0.115	0.583	0.404	0.045*
Self-esteem	-0.085	0.686	1		-0.198	0.343	-0.168	0.423
Body image perception	-0.115	0.583	-0.198	0.343	1		0.260	0.210
Body image satisfaction	0.404	0.045*	-0.168	0.423	0.260	0.210	1	
Widow women								
Age	-0.212	0.499	-0.018	0.948	0.007	0.979	0.531	0.042*
QoL	1		0.536	0.039*	-0.531	0.041*	-0.202	0.470
Self-esteem	0.536	0.039*	1		-0.265	0.340	0.423	0.116
Body image perception	-0.531	0.041*	-0.265	0.340	1		0.0	1
Body image satisfaction	-0.202	0.470	0.423	0.116	0.0	1	1	

r, Pearson’s correlation test *Significant, p-value < 0.05

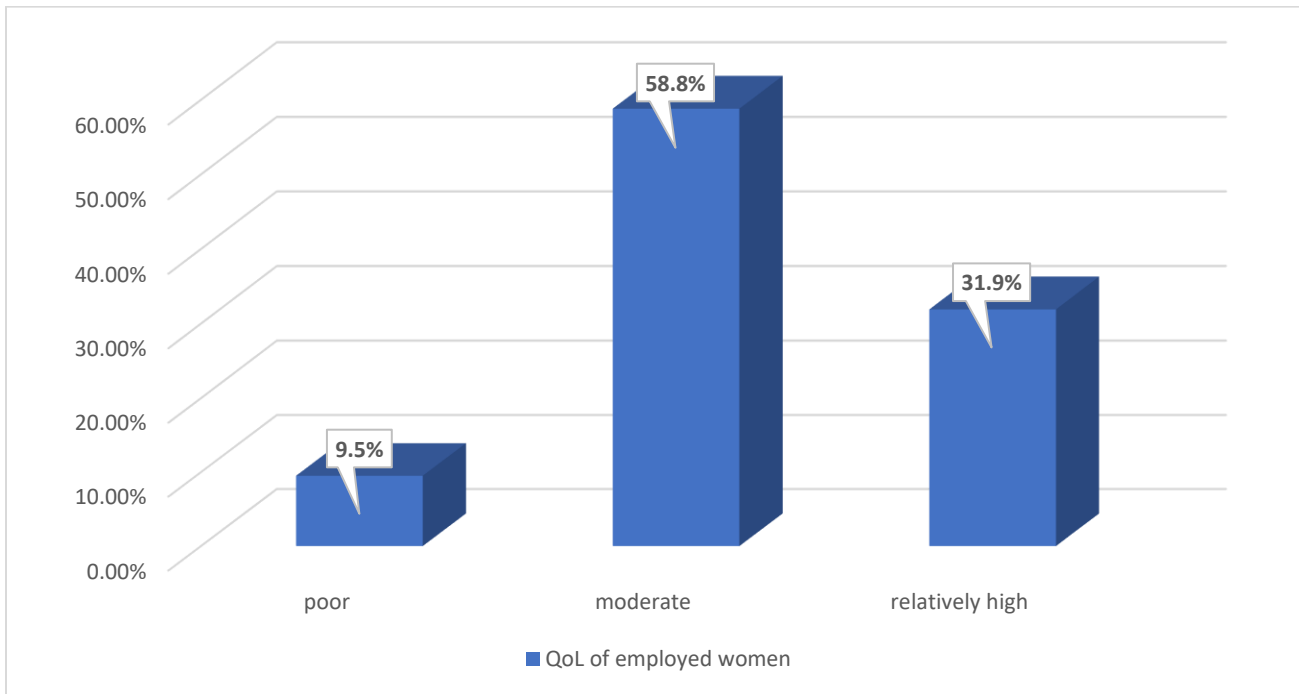


Figure 1: Quality of life level of employed women

DISCUSSION

Globally, especially at the Arab level, family structure is changing due to modifications in marriage, lifestyle, higher education levels, labor force with increased women participation, urbanization, modernization and culture in addition to increasing age at first marriage in our societies [18].

The current study showed that there is no statistical significance between marital status and body mass index of employed women, this may be explained presence of supportive environment to maintain healthy lifestyle in addition to stress of new responsibilities. In consistent with these findings, some studies revealed no variations in the BMI of never married and married persons according to Mata et al. [19].

In contrast to these findings, Abrha et al. [20] found that marriage may be connected to a more sedentary lifestyle, and high-energy foods are typically supplied to women throughout the postpartum period, which could explain why overweight and obesity are more prevalent among married women.

In addition to Mata et al. [21] who supported these findings as marriage didn't necessarily associate with a healthier BMI as married couples commonly affected each other's dietary habits with increasing food intake and divorce was a predictor for weight gain in general.

The current study showed that 69.4% of employed women had relatively high levels of social relationships, this may be due to building more connections and having positive social interactions through work. In consistent with these results, Marcacine et al. [22] found that the domain of social relationships obtained the best average among working women.

The current study showed that physical health domain and social relationships domain were statistically significant for marital status. Regarding physical health domain, it was found that single women had highest physical health compared to married, divorced and widow women. This may be explained as single women may have less responsibilities and more free time to for exercise and hobbies in addition to having sufficient hours of rest and sleep contributing to have better physical health compared to married women. In agreement with these findings, Nayir et al. [23] found that physical domain scores of QoL were significantly lower for the married individuals compared to single ones.

Regarding social relationships domain, married women had the highest social relations compared to single, divorced and widow women, this may be explained as marriage provides emotional stability and sexual satisfaction, increases social integration and support in addition to presence of larger social

networks prompting sense of social wellbeing. In consistent with these finding, Gondodiputro et al. [24] confirmed that QoL differed regarding marital status among elderly as individuals who had spouses (married) had a higher QoL score especially social relationship domain compared to those without spouses.

Also, Kim and Kim [25] found that married mothers had higher QoL in all domains including social one than single mothers. Declaring that single mothers perceived lower levels of social support, less communication with family members and friends, being more stressed and more exposed to depression in addition to exposure to economic problems.

In contrast to the current study, Alrayes et al. [26] study on dentists in Saudi Arabia with a mean age of 35.72 ± 8.58 years, there was no statistical significance between marital status and QoL.

There was no statistically significant relation between self-esteem and marital status of employed women, this may be due to self-esteem is affected by many factors rather than marriage whether internal as one's beliefs, feelings and thoughts or external as social acceptance, physical appearance, fame and wealth. This finding is confirmed by Egwurugwu et al. [27] that showed there was no remarkable link between self-esteem and marital status.

Also, Erçetin and Görgülü [28] who conducted a study on working women's self-esteem finding that marital status did not make remarkable changes on working women's self-esteem.

On the other hand, many studies showed that marital status influenced self-esteem as Shrestha et al. [29] indicated that those who are married have higher self-esteem than those who are unmarried and this may be due to the love and support of husband.

The current study showed that there was not any statistically significant relationship between marital status and body image perception. In agreement with our study, Kvaløy et al. [30] declared that no impacts regarding the potential influence of marital status on the body image perception.

The current study showed that there was a statistically significant relation between marital status and BIS. Single women were more satisfied with their current body images compared to married, divorced and widow women. This may be explained as single individuals especially women seeking for suitable partner for marriage try to maintain an ideal body weight to keep their

attractiveness and maximize their confidence resulting in having better body image satisfaction. In consistent to current study, Klos and Sobal [31] found that married and formerly married women were often unsatisfied with their body images and perceived themselves as overweight and desired a lower weight compared to never married women.

In this current study, there is a statistically significant correlation between QoL and self-esteem among employed women, this may be due to both self-esteem and QoL deal related to one's subjective perception and evaluation of himself and his life, so both are related to each other. In agreement with these finding, Tavares et al. [32] study on elderly showed that individuals with low self-esteem were likely to have low QoL scores.

Also, there is a statistically significant correlation between QoL and body image satisfaction among employed women. This can be explained as body dissatisfaction is commonly related to impairment in physical health, mental health and psycho-social functioning in addition to association with higher rates of stress, low self-esteem and depression. All these impacts affect QoL negatively. In consistent with these results, Kim and Kang [33] study on middle-aged adults declared that body image was positively correlated with QoL considering body image was a significant predictor affecting the QoL in middle-aged adults, The study confirmed that middle-aged women who were satisfied with their body image, their QoL improved.

CONCLUSION

Since delayed marriage, divorce and decreased marriage rates become more evident in our society impacting QoL, self-esteem, BIP and BIS, it is found that marital status affects QoL and BIS of employed women while self-esteem and BIP are not affected. QoL changes depending on the level of self-esteem and BIS.

Recommendations:

For married women: Implementing social programs to improve quality and stability of marriage and providing free counselling services to help married couples solve their problems and avoid divorce.

For single, divorced and widow women: Increase their engagement in different fields and activities in the society acquiring new skills and relationships that reflect on their quality of life, working on changing people's negative opinions about delayed marriage and divorce, and provide psychosocial

support to overcome negative impact of delayed marriage and divorce.

Further studies are needed with larger sample size for better detection of the extent of marital changes and their impacts in our community.

Conflict of interest

The authors declared that they have no conflicts of interest with respect to authorship and/or publication of this article.

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