Original Article

Quality of Life among Women with Spontaneous Abortion

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ABSTRACT

Objective: To find out the impact of spontaneous abortion on women's quality of life across the following domains; physical, psychological, social relationship and environment and to identify the association between overall quality of life and women's sociodemographic characteristics

Study Design: Descriptive correlational study

Place and Duration of Study: This study was conducted at the Al-Hilla City, Babylon Governorate, Iraq, from 15th January 2026 to 15th June 2026.

Methodology: One hundred and eighty women who suffered from spontaneous abortion were enrolled.

Results: An overall positive trend as most respondents marked their quality of life as moderate 53.3% and high 46.7%, while none marked it as low. High mean scores for family, friends and marital relationships are an indicator of strong social support and therefore contribute to well-being.

Conclusion: The continuous psychological and physical follow-up care for women after spontaneous abortion to ensure comprehensive recovery.

Key Words: Quality of life, Spontaneous abortion, Miscarriage, Psychosocial well-being.

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INTRODUCTION

Spontaneous abortion, commonly referred to as miscarriage, represents one of the most frequent pregnancies, affecting up to 10-15% of medically recognized pregnancies internationally[1]. Abortion does not only involve physical, mental, social and financial health; it is appropriate to consider how abortion information is explained and the way to improve their quality of life (QoL) after abortion, in every aspect, and develop measures of a support that can respond to the phenotypes[2]. Abortion is a profoundly traumatic event that affects women emotionally, psychologically, and dating. An important dimension affected by abortion is marital relationship[3].

Women who have abortion are seven times more likely to have increased signs of post-traumatic stress disorder (PTSD) compared to women, with the prevalence of PTSD in this population as high as 39%[4]. Stress is a state of mind and framework caused by mental and physical stress in the individual, stress is a nation caused by stress. Stress can be roughly interpreted as similar to fearful pressure and consider the state an individual exhibits against incompatible external stimuli[5]. Quality of life is a term used to describe how well individual needs are met, and to what extent individuals perceive satisfaction or dissatisfaction in various areas of life, including how they report their own levels of pleasure, happiness, and energy[6]. QoL is a multidimensional construct that includes physical, psychological, social, and functional well-being. After spontaneous abortion, the first category of existence can be reduced both in the immediate period (intense grief, pain, fatigue, pollution) and in the long term (persistent mood disorders, dating pressure, reduced existential happiness)[7].

Clinically, the point between women and healthcare providers through abortion are funded for opportunities to assess coping, explore distress, and implement supportive interventions, yet qualitative and quantitative assessments show inconsistent conversations, inadequate records of predictable physical, emotional, and psychological changes[8]. This gap between clinical need and service provision may worsen the QoL trajectory for some women, suggesting that measuring coping methods and quality of life

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concurrently will generate practical evidence to inform training, protocols, and resource allocation[9].

METHODOLOGY

A descriptive correlational study was conducted in two hospitals at Al-Hilla City from 15th January 2026 to 15th June 2026 letter 102 dated 18-1-2026. One hundred and eighty women with spontaneous abortion were enrolled. Data were collected using questionnaire consisting of three parts: sociodemographic data, reproductive information, and the WHOQOL-BREF Scale. QoL was measured using the World Health Organization Quality of Life-BREF (WHOQOL-BREF), developed by the WHO, consisting of four core domains: physical, psychological, social relationships, environmental, measured using a three-point likert scale. The data was analyzed through SPSS-25.

RESULTS

The higher percentage was between 26 and 33 years, with women comprising 44.4%. Most participants having completed primary education (22.8%), while the illiteracy rate was very low (3.9%). The highest unemployment rate was recorded (57.2%), with the largest concentration (59.4%) in urban areas. 66.7% women had no familial relationship with their husbands, confirming that most marriages were between non-relatives (Table No. 1).

Table No. 1: Sociodemographic characteristics of the participants (n=180)

Variable	Category	No.	%
Age (years)	18-25	56	31.1
	26-33	80	44.4
	34-40	44	24.4
Educational Level	Primary	41	22.8
	Reads and writes	36	20.0
	Intermediate	34	18.9
	Preparatory	34	18.9
	Institute, college or above	28	15.6
	Illiterate	7	3.9
Occupational Status	Unemployed	103	57.2
	Employed	68	37.8
	Student	9	5.0
Residential Environment	Urban	107	59.4
	Rural	73	40.6
Degree of Kinship	Foreigner (Non-relative)	120	66.7
	Relative	60	33.3

51.1% women had given birth once or twice, with 55% of them having one or two live births, although a significant proportion (32.8%) had no children. 68.3% reported experiencing one miscarriage, while 31.7% reported recurrent miscarriages. The average gestational age at the time of the current miscarriage was 10-15 weeks (47.2%) (Table No. 2).

Table No. 2: Reproductive history and clinical data of the participants

Variable	Category	No.	%
Gravida	1-2	92	51.1
	3-4	67	37.2
	≥5	21	11.7
Para	1-2	99	55.0
	0	59	32.8
	≥3	22	12.2
Number of Abortions	1	123	68.3
	2	34	18.9
	≥3	23	12.8
Duration since last abortion (months)	1-2	59	32.8
	3-4	74	41.1
	5-6	47	26.1
Age of current abortion (weeks)	< 10	54	30.0
	10-15	85	47.2
	≥16	41	22.8
Blood Group & Rh (wife)	A+	54	30.0
	O+	42	23.3
	AB+	32	17.8
	B+	22	12.2
	O-	11	6.1
	A-	10	5.6
	AB-	7	3.9
	B-	2	1.1
Blood Group & Rh (husband)	A+	61	33.9
	O+	40	22.2
	B+	23	12.8
	AB+	21	11.7
	O-	16	8.9
	A-	14	7.8
	B-	4	2.2
	AB-	1	0.6

The social domain had the highest score with a mean score of 2.58±0.33 and 69.4% of participants in the high range (2.34-3.00), which shows that firm support from the husband, family and friends is important for emotional rehabilitation. The environmental domain (2.44±0.35, high) comes in second, suggesting that safety, stable home life and access to health care are good for most (62.2%) of the cohort. On the other hand, the internal recovery dimensions have a slower progression. The psychological domain, moderate level (74.4%, 2.25±0.23) dominates with the management of trauma and negative emotional triggers still being a mental transition. The physical domain had the lowest mean score (2.06±0.27; moderate), with 82.2% of the respondents falling in the moderate scale and 2.2% in the low scale (Table 3). The recovery from miscarriage is a slower process than the recovery from the medical and somatic aspects, which usually involves less pain,

exhaustion and sleep disturbances, and underscores the need for ongoing somatic and medical care (Table 4).

The most participants reported a moderate (53.3%) to high (46.7%), QoL, with none in the low category, indicating an overall positive trend. Strong social support reflected in high mean scores for family, friends, and marital relationships plays a key role in maintaining well-being. However, physical energy and health-related aspects remain at a moderate level, physical recovery lags behind social and emotional adjustment (Table 5).

Age, education and living environment had no significant effects on quality of life, while employment status and degree of kinship significantly impacted it. QoL was the most common factor (100%), academic background or age may offer some protection after an abortion. The women married to relatives reported a higher quality of life than those married to non-relatives, highlighting the importance of strong family support for recovery and well-being (Table 6).

Table No. 3: Responses of participants regarding QoL items

Item	Always	Sometimes	Rarely	Mean	SD	Assessment
Physical domain						
I have enough energy for activities	64(35.6%)	78(43.3%)	38(21.1%)	2.14	0.74	Moderate
I suffer from health problems	75(41.7%)	68(37.8%)	37(20.6%)	2.21	0.76	Moderate
I can sleep well & comfortably	86(47.8%)	69(38.3%)	25(13.9%)	2.34	0.71	Moderate
Health prevents daily activities	29(16.1%)	78(43.3%)	73(40.6%)	1.76	0.71	Moderate
I feel physically recovered	67(37.2%)	80(44.4%)	33(18.3%)	2.19	0.72	Moderate
Psychological Domain						
I feel satisfied with myself.	87(48.3%)	71(39.4%)	22(12.2%)	2.36	0.69	High
Difficult dealing with negative emotions	41(22.8%)	77(42.8%)	62(34.4%)	1.88	0.75	Moderate
I can adapt to what happened	108(60.0%)	57(31.7%)	15(8.3%)	2.52	0.65	High
I feel sadness/anxiety when remembering	114(63.3%)	49(27.2%)	17(9.4%)	2.54	0.66	High
I am motivated for future goals	145(80.6%)	29(16.1%)	6(3.3%)	2.77	0.49	High
Social domain						
I feel family supports me	129(71.7%)	40(22.2%)	11(6.1%)	2.66	0.59	High
Friends provide emotional support	123(68.3%)	46(25.6%)	11(6.1%)	2.62	0.60	High
I can talk openly without judgment	131(72.8%)	37(20.6%)	12(6.7%)	2.66	0.60	High
Husband relationship became stronger	130(72.2%)	37(20.6%)	13(7.2%)	2.65	0.62	High
Medical staff provided adequate support	87(48.3%)	60(33.3%)	33(18.3%)	2.30	0.76	Moderate
Environmental domain						
Environment provides safety/stability	124(68.9%)	42(23.3%)	14(7.8%)	2.61	0.63	High
Access to health services.	90(50.0%)	59(32.8%)	31(17.2%)	2.33	0.76	Moderate
Satisfied with living conditions	102(56.7%)	54(30.0%)	24(13.3%)	2.43	0.72	High
Sufficient financial resources	84(46.7%)	73(40.6%)	23(12.8%)	2.34	0.69	High
I can easily get help	109(60.6%)	52(28.9%)	19(10.6%)	2.50	0.68	High

Low (1.00-1.66), Moderate (1.67-2.33), High: (2.34-3.00)

Table No. 4: Categorical distribution of quality of life domains

Quality of life domain	Low Level	Moderate Level	High Level
Social Domain	-	55(30.6%)	125(69.4%)
Environmental Domain	-	68(37.8%)	112(62.2%)
Psychological Domain	-	134(74.4%)	46(25.6%)
Physical Domain	4(2.2%)	148(82.2%)	28(15.6%)

Table No. 5: Overall assessment of quality of life

Overall quality of life level	Score range	No.	%	Mean±SD
Low	1-1.66	-	-	47.03±3.41
Moderate	1.67-2.33	96	53.3	
High	2.34-3	84	46.7	

Table No. 6: Relationship between overall quality of life, and sociodemographic characteristics

Variable	Category	Moderate QoL	High QoL	$\chi 2$	p-value
Age (years)	18-25	31(54.4%)	26(45.6%)	0.144	0.931
	26-33	46(52.9%)	41(47.1%)		
	34-40	19(52.8%)	17(47.2%)		
Education	Illiterate	4(57.1%)	3(42.9%)	2.158	0.827
	Reads & Writes	7(46.7%)	8(53.3%)		
	Primary	20(54.1%)	17(45.9%)		
	Intermediate	24(55.8%)	19(44.2%)		
	Preparatory	6(66.7%)	3(33.3%)		
	Inst./College	35(51.5%)	33(48.5%)		
Occupation	Unemployed	82(58.2%)	59(41.8%)	12.185	0.002*
	Student	-	9(100%)		
	Employed	14(46.7%)	16(53.3%)		
Residence	Urban	45(51.1%)	43(48.9%)	0.358	0.549
	Rural	51(55.4%)	41(44.6%)		
Kinship	Relative	21(39.6%)	32(60.4%)	6.223	0.013*
	Foreigner	75(59.1%)	52(40.9%)		

*Significant at $p<0.05$

DISCUSSION

In the present study, majority of women experiencing spontaneous abortion were aged 26-33 years (44.4%), had primary-level education (22.8%), unemployed (57.2%), resided in urban areas (59.4%), and married to non-relatives (66.7%). This result is aligning with Tavoli et al[10] and Iwanowicz-Palus et al[7] reported that most women experiencing spontaneous abortion were within the reproductive age range. Whereas Zheng et al[11] highlighted the role of educational and socioeconomic factors in reproductive health outcomes. Women who aged 26-33 are at the height of their reproductive capacity, making them more likely to experience pregnancy and consequently pregnancy loss. Limited access to preconception health care and reduced health literacy due to unemployment and lower levels of education may lead to poor health outcomes during pregnancy. The findings suggest that both demographic and socioeconomic characteristics may influence women's reproductive experiences.

This study showed that 51.1% women had given birth once or twice, and 55% had one or two living children, while 32.8% had no children. The result is in line with Futakawa et al[12], reported that many of pregnant women were multiparous, indicating the majority of women had experienced one or more previous births before miscarriage. the study found that 68.3% of women experienced one miscarriage, whereas 31.7% reported recurrent miscarriages. This finding is agree with Genovese & McQueen[13] who reported that sporadic miscarriage is substantially more common than recurrent miscarriage, indicating that most women experience a single miscarriage episode, whereas recurrent miscarriages affect a smaller proportion of women. The average gestational age at the time of miscarriage was 10-15 weeks among 47.2% of participants (Table No. 2). This finding is in line with Magnus et al[14], who found that most cases of spontaneous abortions were in the first trimester of pregnancy and before 14 weeks gestation. This study found that A+ was the most common blood group among both wives and husbands, while a considerable proportion of women (16.7%) and husbands (19.4%) were Rh-negative. This finding is consistent with Akogu et al[15], who found that (Rh +ve) blood groups predominated among the pregnant women while (Rh -ve) blood groups formed a smaller but clinically significant proportion.

This study showed that most women reported a moderate 53.3% to high 46.7% quality of life following spontaneous abortion, with no participant scoring in the low range. The social domain achieved the highest mean score (2.58±0.33), with 69.4% of participants classified in the high range. The environmental domain followed (62.2% high). Majority of women 74.4% had a moderate level of QoL in the psychological domain (2.25±0.23) following spontaneous abortion, while the physical domain recorded the lowest mean score (2.06±0.27), with 82.2% of participants in the moderate range. This finding is align with Bolbocean et al[16], reported that health related QoL improves progressively during the year following miscarriage, although women with recurrent pregnancy loss tend to experience lower quality of life scores than those with a single miscarriage. Futakawa et al[12] showed that women had moderate QoL after pregnancy loss and social functioning had a better recovery than physical health. Iwanowicz-Palus et al[7] reported that women after miscarriage generally perceived a satisfactory quality of life and that social support was significantly associated with better QoL outcomes, it is also consistent with results in this study. Support from family, friends, and healthcare providers helps women to cope with the emotional and social consequences of miscarriage. This

result may indicate the important role of social relationships in promoting recovery and well-being after pregnancy loss.

Present study showed that age, educational level, and residential environment had no significant effects on QoL among women with spontaneous abortion (Table No. 6). This finding is consistent with Farren et al[17] and Mutiso et al[18], found that the psychosocial and interpersonal factors were more important to women's health after pregnancy loss than the demographic factors were. The lack of significant differences by age, education, and place of residence may be because miscarriage has a similar emotional impact on women regardless of their demographic characteristics. However, employment status was significantly associated with QoL. This result is align with the study by Di Nallo and Köksal[19], found that the adverse effects of economic insecurity and employment disruption on women's health and well-being. The women who are employed, might have a more positive QoL because of financial security, more social involvement, and better access to medical services. The present study showed that there was a significant relationship between degree of kinship and QoL. This result is consist with Iwanowicz-Palus et al[7], showed that higher levels of perceived social support are associated with better health perception and greater satisfaction with QoL among women following pregnancy loss. The social roles and relational bonds are more powerful determinants of post-abortion QoL than demographic characteristics such as age or educational level.

CONCLUSION

Majority of participants were aged between 26-33 years old with highest unemployment rate, with the largest concentration lived in urban areas. Most of participants having completed primary education level, and the majority of women reported no familial relationship with their husbands (non-consanguineous). A third of participants had no living children, and most losses occurred at 10-15 weeks of gestation. There were no participants who scored in the low QoL category. Most reported moderate to high QoL. Occupational status and the degree of kinship was the only socio-demographic characteristics that having significant association with the quality of life. Women married to relatives reported a higher QoL than those married to non-relatives.

Author's Contribution:

Concept & Design or acquisition of analysis or interpretation of data:	Ahood Ahsan Mahdi, Wafaa Ahmed Ameen
Drafting or Revising Critically:	Ahood Ahsan Mahdi, Wafaa Ahmed Ameen
Final Approval of version:	All the above authors
Agreement to accountable for all aspects of work:	All the above authors

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