

Effects of Spontaneous Abortion on Women's Psychological Domain of Quality of Life

تأثيرات الإجهاض التلقائي على المؤشر النفسي لنوعية حياة النساء

Sarab N. Fadhil, MSc.N*

Rabe'a M. Ali, PhD**

* Academic Nurse, Maternal and Child Health Nursing Department, College of Nursing, University of Baghdad.

** Assistant Professor, Maternal and Child Health Nursing Department, College of Nursing, University of Baghdad.

المستخلص:

الهدف: لمعرفة العلاقة بين المجال النفسي لنوعية الحياة مع متغيرات الدراسة (الديموغرافية، الإنجابية).

المنهجية: أجريت دراسة وصفية على عينة غير احتمالية (غرضية) من (٢٠٠) امرأة تعاني من الإجهاض التلقائي متواجدة في ردهات النسائية والتوليد في أربعة مستشفيات وتشمل: مستشفى الكرخ التعليمي للولادة، مستشفى العلوية التعليمي للولادة، مستشفى اليرموك التعليمي، مستشفى بغداد التعليمي. استخدمت الاستبانة كأداة لجمع المعلومات للفترة من ٣ شباط ٢٠١٣ إلى ٢٦ نيسان ٢٠١٣ وتتكون من أربعة أجزاء تتضمن الخصائص الديموغرافية، الإنجابية، و المجال النفسي لنوعية الحياة. تم إجراء الدراسة الاستطلاعية لاختبار ثبات الاستبانة وجرى صدق المحتوى من خلال (٢٠) خبير واستخدام الإحصاء الوصفي في تحليل البيانات.

النتائج: أظهرت النتائج إن (٢٦,٥%) من النساء معدل أعمارهن يتراوح بين (٢٥-٢٩) سنة ومعدل كتلة الجسم (٤٨%) ضمن الوزن الطبيعي و(٢٧,٥%) خريجات ابتدائية و(٢٥%) من الأزواج خريجون كلية أو معهد و(٨٠%) ربات بيوت و (٥٤,٥%) من الأزواج موظفون و (٤٨%) ضمن مستوى اقتصادي واطئ. أما عن المعلومات الإنجابية (٦٦%) من النساء أما بكرية أو متعددة الحمل و(٢٥%) من النساء لديهن على الأقل ولادتين و(٥٢,٥%) لديهن إجهاض واحد سابق. كذلك عن العلاقة بين الجانب النفسي لنوعية الحياة و المعلومات الديموغرافية (العمر) (٠,٠٠٦) وبين الجانب النفسي والمؤشرات الإنجابية (عدد الولادات) (٠,٠٣١).

التوصيات: - لقد أوصت نتائج الدراسة بعمل برنامج تعليمي للنساء خلال الحمل يتضمن (معنى الإجهاض التلقائي، أسبابه، والوقاية منه). كما أوصت الدراسة بتعزيز الرعاية النفسية للنساء في مراكز الرعاية الصحية. كما أوصت الدراسة بنشر الوعي عن هذه المشكلة من قبل وزارة الصحة من خلال عمل كتيب أو إقامة المحاضرات.

Abstract

Objective: To find out the association between psychological domain of Quality of life with study variable (demographic & reproductive).

Methodology: A descriptive Analytical study was conduct on Non-probability (purposive sample) of (200) women who have suffering from spontaneous abortion in maternity unit from four hospitals which include Al-Elwya maternity teaching hospital, and Baghdad teaching hospital at Al-Russafa sector. Al-karekh maternity hospital and Al-Yarmook teaching hospital at Al-karekh sector. A questionnaire was used as a tool of data collection for the period of February 3rd 2013 to April 26th 2013 and consisted of four parts, including demographic, reproductive characteristics, and psychological domain of quality of life. A pilot study was carried out to test the reliability of the questionnaire and content validity was carried out through the 20 experts. Descriptive statistical analyses were used to analyze the data.

Results: The results of the study revealed that (26.5%) of women their age range (25-29) years, (48%) within the normal body weight, (27.5%) graduated from primary school, (25%) of their husband graduated from college or institute, (80%) housewives, (54.5%) of their husband were employee, (48%) within low category of socioeconomic status. And about the reproductive information (66%) of women were primi or multi gravida, and (25%) have previous two delivery, and (52.5%) have previous one abortion, also there are association between psychological domain of quality of life and sociodemographic status (Age groups) at (p=0.006), and with reproductive parameters (gravid) at (p=0.031).

Recommendations: The study recommended Conduct Structured Teaching Programmed (STP) to pregnant women's with history of miscarriage included meaning, causes, and prevention of miscarriage, and Reinforce the role of the psychological care for the women by primary health center. the study recommends to collaborative action can Ministry of Health take in distribution of awareness for women towards the problem by conducting a booklet or lectures about miscarriage.

Keywords: Spontaneous Abortion, Psychological effects, Quality of life

Introduction:

Spontaneous abortion and miscarriage are synonymous terms. In the medical literature, spontaneous abortion is most often used, while in clinical practice and among the general population is used miscarriage. It occurs in approximately 15-20% of all known. Women's experience of miscarriage is obvious and distressing, both psychologically and physiologically⁽¹⁾. These psychologically effects of a miscarriage once it occurs can often take several weeks to a month to recover before trying again. After a failed pregnancy, women suffer with the shame of what they perceive to be their own inadequacy as a woman, loving wife and life-giver. Most females feel it is unnatural for them to not be able to bear children! Many women feel useless, worthless, empty, destitute and unworthy of their husbands, sentenced to a life of shame because they cannot fulfill the very purpose for which they were created. They blame themselves for everything they have done in life⁽²⁾.

Methodology:

Descriptive study was carried out upon women who suffering from spontaneous abortion in maternity unit. Non-probability (purposive sample) was chose and collection gathered by questionnaire format, and Interview with women. The period of data collection for all hospitals was three months form the period of February 2^{ed} 2013 to April 26th 2013. The study was conducted in four hospitals at Baghdad City which include Al-Elwia Maternity Teaching Hospital and Baghdad Teaching Hospital at Al-Russafa sector. Al –karckh Maternity Hospital, and Al-Yarmook Teaching Hospital at Al-karckh sector. (200) women who sufferings from spontaneous abortion in maternity unit in these hospitals were selected study sample. A questionnaire was used as a tool of data collection to fulfill the objectives of the study and consisted of four parts, including

demographic (10 items), reproductive characteristics (6 items), causes of spontaneous abortion this part is consisted of (2) items which include having disease (3 items) which comprised (medical, reproduce- tive, and gynecology), and the other causes include (9 items). ,and psychological domain of quality of life which consists of (5) sub domains(Positive feeling, Negative feeling, Self-esteem, Concentration &Memory, and Thinking).These items are rated according to three level Likert scale (always, sometimes, never),and scored (3,2,1).Pilot study was carried out between the January 25th to January31th of 2013, on (10) women who have spontaneous abortion in maternity unit to determine the reliability of questionnaire and content validity was carried out through the 20 experts. Descriptive statistical analyses were used to analyze the data. Data were analyzed using the Statistical Package for Social Sciences (SPSS) version 10, and Excel. Through the application of descriptive statistical data analysis include (Frequencies, Percentage, Mean, Standard Deviation, relative sufficiency & Mean score). $R.S\% = MS / \text{No. of scale} * 100\%$ Cutoff point= $3+2+1/3=2$.

Results:**Table 1.** Distribution of Socio-Demographical Characteristics of (200) Women with Spontaneous Abortion

Variables	Groups	Freq.	%	C.S. ^(*) [P-value]
Age Groups (Per Years)	< 20	12	6	$\chi^2 = 73.420$ P=0.000 HS
	20 – 24	41	20.5	
	25 – 29	53	26.5	
	30 – 34	42	21	
	35 – 39	33	16.5	
	40 – 44	18	9	
	45 – 49	1	0.5	
	Mean \pm SD	30.025 \pm 7.00		
Educational level - wife	Illiterate	24	12	$\chi^2 = 34.420$ P=0.000 HS
	Reads and writes	20	10	
	Primary	55	27.5	
	Intermediate	28	14	
	Preparatory	23	11.5	
	Institute , college or above	50	25	
Educational Level - Husband	Illiterate	17	8.5	$\chi^2 = 26.200$ P=0.000 HS
	Reads and writes	29	14.5	
	Primary	38	19	
	Intermediate	45	22.5	
	Preparatory	21	10.5	
	Institute , college or above	50	25	
Occupational Status of Wife	Housewife	160	80	$\chi^2 = 338.120$ P=0.000 HS
	Student	36	18	
	Employee	1	0.5	
	Free Jobs	3	1.5	
Occupational Status of the Husband	Official	75	37.5	$\chi^2 = 154.640$ P=0.000 HS
	Employee	109	54.5	
	Retired	1	0.5	
	Without Work	15	7.5	

HS=High significant, S= Significant, NS= No Significant, χ^2 = chi square, Freq.=Frequency, %= percentage, C.S :comparative Significance , P:Probability level

Table (1) Shows that the highest percentage (26.5%) of study sample was at age group (25-29) years; and the mean age and SD of age: (30.025 \pm 7.00). The highest percentage (27.5%) of study sample was graduated from primary school while the highest percentages (25%) of their husband were graduated from college or institute. The highest percentage (80%) of study sample work was housewife, while the highest percentage (54.5%) of their husband was employees.

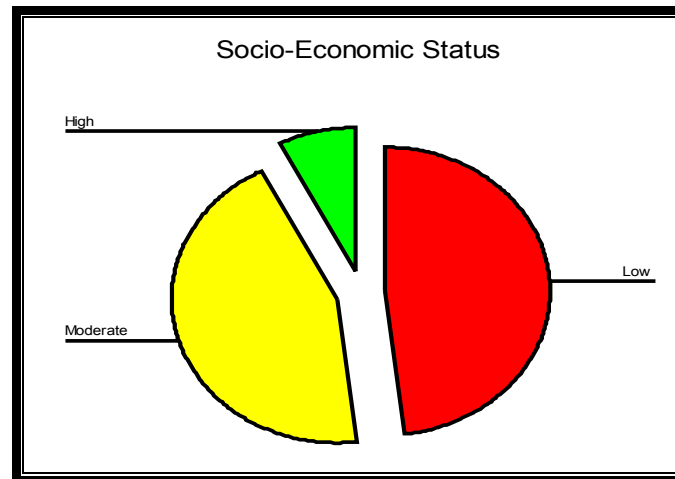


Figure 1. Pie chart for the Socioeconomic Status of the studied sample

Figure (1): shows that the vast majority of the study sample is within low category and accounted for 96(48.0%), then followed within moderate category of assessment and they accounted for 89(44.5%) and the remaining within high category and accounted for 15(7.5%).

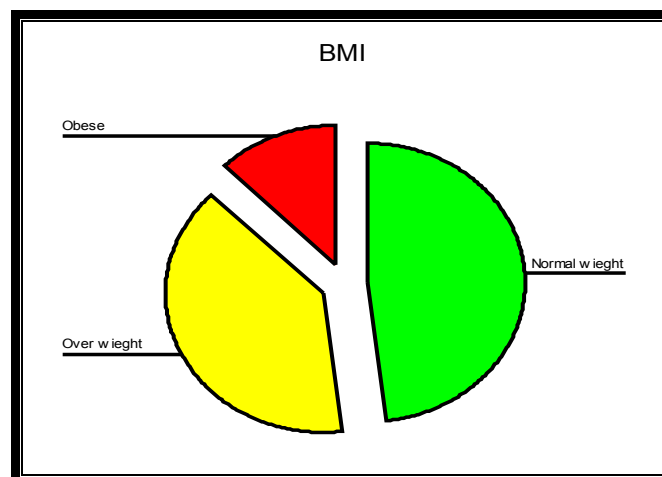


Figure 2. Pie chart for the BMI groups of the studied sample

Figure (2): shows the highest percentage of study sample is within normal weight group, and they are accounted 96(48.0%), then followed within Overweight group, and they are accounted 79(39.5%), and the remaining within Obese group, and they are accounted for 25(12.5%).

Table 2. Distribution of Reproductive Parameters of (200) Women with Spontaneous Abortion

Reproductive Parameters	Groups	Freq.	Percentage	C.S. (*) [P-value]
Gravida	1 - 2	66	33	$\chi^2 = 122.92$ P=0.000 HS
	3 - 4	66	33	
	5 - 6	41	20.5	
	7 - 8	17	8.5	
	9 - 10	9	4.5	
	11 - 12	1	0.5	
Para	0	49	24.5	$\chi^2 = 291.54$ P=0.000 HS
	1	41	20.5	
	2	50	25.0	
	3	26	13.0	
	4	16	8.0	
	5 +	18	9.0	
Number of Abortion	1	105	52.5	$\chi^2 = 35.140$ P=0.000 HS
	2	41	20.5	
	3	34	17	
	4	12	6	
	5	6	3	
	6	1	0.5	
	7	1	0.5	
Blood group- wife	A	47	23.5	$\chi^2 = 144.76$ P=0.000 HS
	B	23	11.5	
	AB	10	5	
	O	120	60	
Blood group - Husband	A	34	17	$\chi^2 = 222.88$ P=0.000 HS
	B	18	9	
	AB	8	4	
	O	140	70	
Rhesus - wife	P	178	89	Binomial test P=0.000 HS
	N	22	11	
Rhesus - Husband	P	196	98	Binomial test P=0.000 HS
	N	4	2	
Type of Current Abortion	Threatened	53	26.5	$\chi^2 = 103.12$ P=0.000 HS
	Inevitable	8	4	
	Missed	67	33.5	
	Complete	2	1	
	Incomplete	23	11.5	
	Habitual	47	23.5	

HS=high significant, S= Significant, NS= No Significant, Freq. =Frequency, %= percentage, χ^2 = chi square, Freq. =Frequency, %= percentage, C.S: Comparative Significance, P: Probability level

Table (2): shows the highest percentage (33%) of study sample is reported at the first and second groups with range interval (1-4) status. The highest percentage (25%) of study sample had two deliveries. The highest percentage (52.5%) of study sample had abortion (previous one): The highest percentage (60%) of study sample (wife) their blood group is (O), and Rh positive (89%), while their husband the highest percentage blood group is (O) (70%), with Rh positive (98%). The highest percentage of study sample (33.5%) had reported missed spontaneous abortion.

Table 3. Distribution of (200) women with spontaneous abortion according to cutoff point for the studied Questionnaire's items at the first sub domain (Positive Feeling) of the Psychological main domain of Quality of life

Psychological Domain	Groups	F	%	No.	MS	SD	RS	Ass.
1-Sub Domain (Positive Felling)								
Thinking about the future in a positive way	Never	43	21.5	200	2.32	0.81	77.33	P
	Sometimes	50	25					
	Always	107	53.5					
I feel love of others	Never	15	7.5	200	2.63	0.62	87.67	P
	Sometimes	45	22.5					
	Always	140	70					
My health made me feel the suffering of others	Never	3	1.5	200	2.87	0.38	95.67	P
	Sometimes	21	10.5					
	Always	176	88					
I feel I am still able to have pregnancy	Never	40	20	200	2.44	0.81	81.33	P
	Sometimes	31	15.5					
	Always	129	64.5					

Cut of point =2,RS (Relative Sufficiency) =<66.67 low, High= ≥66.67, MS= mean of scores, No. Number, SD= Standard Deviation, Ass.= Assessment, Freq.=Frequency , %= percentage, P:Pass

Regarding subjects responses of "Psychological Main Domain" in light of sub domain one "Positive Feeling", table (3) shows " Pass – (P)" assessment at the items "Thinking about the future in a positive way, I feel love of others, My health made me feel the suffering of others, and I feel I am still able to have pregnancy", since their relative sufficiency were upper cutoff point (66.67%) for positive scale scoring and they are accounted 4(100.0%).

Table 4. Distribution of (200) women's with spontaneous abortion according to cutoff point for the studied Questionnaire's items at the sub domain (Negative Feeling) of the Psychological status

Psychological Domain	Groups	F	%	No.	MS	SD	RS	Ass.
2.Negative Feeling								
Having problems because of the ideas that roam in my mind	Never	52	26	200	2.30	0.86	76.67	F
	Sometimes	35	17.5					
	Always	113	56.5					
scared that pregnancy does not occur again	Never	75	37.5	200	2.15	0.94	71.67	F
	Sometimes	20	10					
	Always	105	52.5					
afraid to become my life is happy because of abortion	Never	106	53	200	1.73	0.85	57.67	P
	Sometimes	42	21					
	Always	52	26					
feel that there is a difficulty to adapt to the new lifestyle	Never	104	52	200	1.84	0.92	61.33	P
	Sometimes	25	12.5					
	Always	71	35.5					
feel sad which is in contrary with my daily work	Never	108	54	200	1.76	0.89	58.67	P
	Sometimes	32	16					
	Always	60	30					
afraid that I would have family problems because of abortion	Never	128	64	200	1.56	0.80	52.00	P
	Sometimes	33	16.5					
	Always	39	19.5					
blame myself for what have I done to deserve this	Never	73	36.5	200	2.10	0.91	70.00	F
	Sometimes	35	17.5					
	Always	92	46					
feel sad for the opinion of others towards me	Never	86	43	200	1.95	0.90	65.00	P
	Sometimes	37	18.5					
	Always	77	38.5					
feel sad when I see children	Never	149	74.5	200	1.43	0.77	47.67	P
	Sometimes	17	8.5					
	Always	34	17					
think that things will not get better	Never	72	36	200	1.97	0.83	65.67	P
	Sometimes	62	31					
	Always	66	33					
lose my sense of the pleasure of life	Never	130	65	200	1.51	0.76	50.33	P
	Sometimes	38	19					
	Always	32	16					
feel nervous	Never	35	17.5	200	2.48	1.07	82.67	F
	Sometimes	44	22					
	Always	121	60.5					
feel fragmented and confused	Never	49	24.5	200	2.32	0.84	77.33	F
	Sometimes	37	18.5					
	Always	114	57					
feel depressed	Never	117	58.5	200	1.62	0.80	54.00	P
	Sometimes	43	21.5					
	Always	40	20					

Table 4. Continues

feel disturbed for no reason	Never	118	59	200	1.54	0.71	51.33	P
	Sometimes	56	28					
	Always	26	13					
feel internal insecure	Never	114	57	200	1.57	0.73	52.33	P
	Sometimes	57	28.5					
	Always	29	14.5					
During the pregnancy there are sad events	Never	154	77	200	1.31	0.61	43.67	P
	Sometimes	30	15					
	Always	16	8					

Cut of point =2, RS (Relative Sufficiency) =<66.67 low, High= ≥66.67, MS= mean of scores, No. Number SD= Standard Deviation, Ass. = Assessment, Freq.=Frequency, %= percentage, P: Pass, F: Failure

Table (4) shows "Failure – (F)" for the following items "Having problems because of the ideas that roam in my mind, scared that pregnancy does not occur again, blame myself for what have I done to deserve this, fell nervous, and feel fragmented and confused", since their relative sufficiency were upper cutoff point (66.67%) for negative scale scoring and they are accounted 5(31.25%), while the leftover item were reported "Pass – (P)" assessment, since their relative sufficiency were under cutoff point (66.67%) for negative scale scoring and accounted 12(68.75%).

Table 5. Distribution of (200) women with spontaneous abortion according to cutoff point for the studied Questionnaire's items at the third sub domain (self-esteem) of the Psychological main domain of Quality of life

Item No.	Psychological Domain	Groups	F	%	No.	MS	SD	RS	Ass.
3-Self-Esteem									
1.3	I feel good about myself	Never	13	6.5	200	2.59	0.61	86.33	P
		Sometimes	57	28.5					
		Always	130	65					
2.3	I feel I am able to accomplish my duties efficiently	Never	24	12	200	2.12	0.59	70.67	P
		Sometimes	128	64					
		Always	48	24					
3.3	I suffer from isolation from the others	Never	162	81	200	1.29	0.64	* 43.00	P
		Sometimes	18	9					
		Always	20	10					
4.3	I feel compassion of others towards me	Never	25	12.5	200	2.52	0.71	84.00	F
		Sometimes	46	23					
		Always	129	64.5					

P= positive response while the other negative response, Cut of point =2, RS (Relative Sufficiency) =<66.67 low, High= ≥66.67, MS= mean of scores, SD= Standard Deviation, Ass. = Assessment, No: Number Freq.=Frequency, %= percentage, P:Pass, F: Failure

Table (5) shows " Pass – (P)" assessment at the items "feel good about myself, feel I am able to accomplish my duties efficiently, and suffer from isolation from the others", since their relative sufficiency were upper cutoff point (66.67%) for positive scale scoring for the first and second items and negative scale scoring for the third item were under cutoff point and they are accounted 3(75.0%), while the forth item were reported "Failure – (F)" assessment, since its relative sufficiency was upper cutoff point (66.67%) and accounted 1 (25.0%).

Table 6. Distribution of (200) women with spontaneous abortion according to cutoff point for the studied Questionnaire's items at the fourth & fifth sub domains (Thinking Concentration and Memory) of the Psychological main domain of Quality of life.

Item No.	Psychological Domain	Groups	F	%	No.	MS	SD	RS	Ass.
4.Thinking									
1.4	I accept any new information about my health	Never	11	5.5	200	2.83	0.50	94.33	P
		Sometimes	12	6					
		Always	177	88.5					
2.4	I feel disturbed when taking any decision	Never	55	27.5	200	2.03	0.76	67.67	F
		Sometimes	84	42					
		Always	61	30.5					
3.4	I think of isolation from others	Never	148	74	200	1.40	0.72	*46.67	P
		Sometimes	24	12					
		Always	28	14					
4.4	I think about what I have got	Never	31	15.5	200	2.46	0.75	82.00	F
		Sometimes	45	22.5					
		Always	124	62					
5.4	I think of pregnancy again	Never	63	31.5	200	2.25	0.91	75.00	P
		Sometimes	24	12					
		Always	113	56.5					
5.Concentration and Memory									
1.5	I suffer from oblivion (dispersion)	Never	154	77	200	1.32	0.63	*44.00	P
		Sometimes	28	14					
		Always	18	9					
2.5	I lose the ability to concentrate	Never	136	68	200	1.39	0.62	*46.33	P
		Sometimes	50	25					
		Always	14	7					
3.5	I can follow up interview with others clearly	Never	7	3.5	200	2.63	0.55	87.67	P
		Sometimes	59	29.5					
		Always	134	67					

P= positive response while the other negative response, Cut of point =2, RS (Relative Sufficiency) =<66.67 low, High= ≥66.67, MS= Mean of scores, SD= Standard Deviation, Ass: Assessment, Freq. =Frequency, %= percentage, P: Pass, F: Failure, No. =Number

Regarding responses of Part 4 of "Psychological Main Domain" named sub domain four "Thinking", table shows " Pass – (P)" assessment at the items " accept any new information about my health, and think of pregnancy again", since their relative sufficiency are upper cutoff point (66.67%) for positive scale scoring for the first and fifth items and " Pass – (P)" assessment for third item "I think of isolation from others" for negative scale scoring with lower cut off point and relative sufficiency, and they are accounted 3 (60%). While the second and forth items " I feel disturbed when taking any decision, and I think about what I have got" show " Failure – (F)" assessment upper cutoff point for negative scale score and accounted 2 (40%).

Regarding women's responses of Part 5 of "Psychological Main Domain named sub domain five "Concentration and Memory", the table shows " Pass – (P)" assessment at the items "I suffer from oblivion (dispersion), I lose the ability to concentrate , and I can follow up interview with others clearly", since their relative sufficiency are upper cutoff point (66.67%) for positive scale scoring for the third items and negative scale scoring under cutoff point for the first and second items and they are accounted 3 (100.0%).

Table 7. Association between Socio-Demographical Characteristics variables with psychological main domain according to "Under/Upper" Cutoff point

Demographical Characteristics X Overall(QoL) Assessment	Psychological Domain	
	C.C.	Sig.
Age Groups	0.288	0.006
Education Level -wife	0.104	0.820
Education - husband	0.159	0.396
Occupation – wife	0.110	0.481
Occupation -husband	0.086	0.685
Residency	0.100	0.361
Place of work	0.233	0.526
Nature of work	0.321	0.213
Housing type	0.065	0.359
Family type	0.075	0.291
Consanguinity	0.113	0.107
Socioeconomic Status	0.091	0.437

Cut of point =2, Sig= Significant , C.C= Contingency Coefficients

Table (7) demonstrates the association between the socio demographic characteristics and psychological domain, there were statistical significant association between age groups and psychological domain ($p=0,006$).

Table 8. Association between Basic Information and Reproductive parameters with psychological main domain according to "Under/Upper" Cutoff point

Reproductive parameters X Overall(QoL) Assessment	Psychological Domain	
	C.C.	Sig.
Gravida	0.241	0.031
Para	0.188	0.200
Number of abortion	0.213	0.148
Type of current abortion	0.111	0.869

Cut of point =2 , Sig= Significant, C.C= Contingency Coefficients

Table (8) shows statistical significant association between women's gravidity and psychological main domain ($P=0.031$).

Discussion:

The result of present study present highest percentage (26,5%) of study sample at age group (25-29) years; and the mean age with SD: (30.025 ± 7.00) as shown in table (1). This finding is consistent with studies assessed that women in their childbearing years, the chances of having a miscarriage can range from 10-25%, and in most healthy women the average is about a 15-20% chance ⁽³⁾. The highest percentage (27.5%) of study sample was graduated from primary school while the highest percentage (25%) of their husband were graduated from

college or institute. This finding is consistent with No risker et.al study that indicates to that woman with <10 years of education had an elevated risk of spontaneous abortion when compared with women with > 12 years of education ⁽⁴⁾. It was reported that the educational level of fathers was correlated with the type of the fathers' occupation ⁽⁵⁾. The highest percentage (80%) of study sample work is housewives, while the highest percentage (25%) of their husbands is employee. This finding is agreement with study reported by Banerjee

who revealed that the significant work factors directly correlated with adverse pregnancy outcomes included: fewer household helpers, and caring and lifting heavy weight⁽⁶⁾.

Socioeconomic status:

The results of the study illustrate the highest percentage (48%) of study sample is within low category of socioeconomic status Figure(1): these result is agreement with studies of Sundari, and Family Health International (fhi) they reported that the social and economic circumstances under which women live influence their reproductive behavior. Poor families tend to marry off their daughters at a young age, which usually means these young wives start having children right away. This often perpetuates a vicious cycle of poverty, low education, and high rates of unintended pregnancy and fertility, and has poorer health status because their limited access to resource inhibits access to good food and health care^(7&8).

Body Max Index:-

Figure (2) shows the highest percentage (48%) of study sample is within normal weight group. These results are agreement with study reported by Turner et.al. Who concluded that the miscarriage rate was 2.3% in the obese category (n=217), compared with 3.3% in the overweight category (n=329), and 2.3% in the normal BMI group (n=621). It mean that the rate of spontaneous miscarriage is low and is not increased in women with BMI>29.9 kg/m(2) compared to women in the normal BMI category⁽⁹⁾.

Reproductive Parameters:-

Table (2) shows the highest percentage (66%) of study sample is reported at the first and second groups with range interval (1-4) status. These results are agreement with study of Ansonia, who reported that the risk of miscarriage is 13% with the first child. With subsequent pregnancies, the risk of miscarriage is 8%, 6% and 4% with the second, third and fourth child, respectively⁽¹⁰⁾. The highest

percentage (25%) of study sample had two deliveries. This result is agreement with Sundaristudy who reported that women of parity two and three had a slightly higher rate of miscarriage than primiparae women⁽⁷⁾.The highest percentage (52.5%) of study sample had previous one. This result is agreement with study of Regan & Rai, who reported that the risk of a new miscarriage, after the first pregnancy, is approximately 28%,⁽¹¹⁾. The highest percentage (60%) of study sample had blood group (O), with Rh positive (89%), while their husband had the highest percentage of blood group (O) (70%), with Rh positive (98%). The wife and husband who have this type of blood group hasn't any problem or any risk for their fetus, but this study reported Rh negative at some of wives who accounted 22 (11%) and at some of husband who accounted 4(2%) which can causes risk for miscarriage. This result agreement with study of Ghasemi et.al who reported that the blood group incompatibility can affect adversely the outcome of pregnancy, couples with blood group incompatibility are more involved in spontaneous miscarriage⁽¹²⁾.

The highest percentage (33.5%) of study sample had reported missed abortion. This study present that majority of abortion type are missed abortion these related to that the missed abortion may be no symptoms at all or a brownish vaginal discharge or brown vaginal bleeding may occasionally be seen, pain is unlikely and os will be closed(Neville et.al)⁽¹³⁾.

1. Positive & Negative Feelings:-

Table (3) shows "Pass- (P)" assessment at the items "thinking about the future in a positive way, feel love of others, my health made me feel the suffering of others, and feel I am still able to have pregnancy", since their relative sufficiency were upper cutoff point (66.67%) for positive scale scoring and they are accounted 4(100%) , and table (4) shows " Failure -(F)" Having problems because of the ideas that roam in my mind, I'm scared that pregnancy doesn't occur again, blame myself for what have I done to

deserve this , I fell nervous, and I feel fragmented and confused ", since their relative sufficiency were upper cutoff point (66.67%) for negative scale scoring and they are accounted 5(31.25%), while the leftover item were reported "Pass-(P)" assessment , since their relative sufficiency were under cutoff point (66.67%) for negative scale scoring and accounted 12(68.75%) . These results are agreement with Kersting& Wagner study which revealed that different patterns of grief, potentially exacerbating decline in a have revealed that women show relationship. Although it is clear that prenatal loss has a large psychological impact the loss of a child is recognized as a very difficult life experience, which can often cause complicated grief (CG) reactions that risk negatively affecting psychological and physical well-being⁽¹⁴⁾.

2. Self-esteem.

Table(5) shows " Pass – (P)" assessment at the items " feel good about myself, feel I am able to accomplish my duties efficiently, and suffer isolation from the others", since their relative sufficiency are upper cutoff point (66.67%) for positive scale scoring for the first and second items and negative scale scoring for the third item and they are accounted 3 (75.0%), while the leftover item are reported "Failure –(F)" assessment, since their relative sufficiency are upper cut off point (66.67%) and accounted 1 (25.0%).This result is agreement with Adolf son study who reported that miscarriage represents the loss of a pregnancy, of a baby or future child, of motherhood, of self-esteem and it may also engender doubts regarding ability to reproduce feelings of emptiness, shame, helplessness and low self esteem are commonly expressed after miscarriage,⁽¹⁴⁾.

3. Thinking and Concentration & Memory:-

Regarding responses of Part 4 of "Psychological Main Domain named "Thinking", table (6) shows " Pass – (P)" assessment at the items " accept any new information about my health, and think of pregnancy again", since

their relative sufficiency were upper cutoff point (66.67%) for positive scale scoring for the first and fifth items and " Pass – (P)" assessment for third item " think of isolation from others" for negative scale scoring with lower cut off point and relative sufficiency, and they are accounted 3 (60%).While the second and forth items " I feel disturbed when taking any decision, and I think about what I have got" show " Failure – (F)" assessment upper cutoff point for negative scale score and accounted 2 (40%).this result is agreement with study reported by Adolfsson, who reported that some women think of the loss of the fetus as the loss of their first child. The woman cannot create an identity for a lost baby, she didn't know the sex, and she has not got a photograph, nothing to hold or to bury. She thus has no object to mourn. A miscarriage is the loss of a part of her. They think about the miscarriage every day, they think they will never be normal again. Regarding women's responses of Part 5 of "Psychological Main Domain named "Concentration and Memory", the table shows " Pass – (P)" assessment at the items "I suffer from oblivion (dispersion), I lose the ability to concentrate , and I can follow up interview with others clearly", since their relative sufficiency are upper cutoff point (66.67%) for positive scale scoring for the third items and negative scale scoring under cutoff point for the first and second items and they are accounted 3 (100.0%),⁽¹⁰⁾. This result was in agreement with Adolfsson and Larsson study results which revealed that twenty percent of grieving women have difficulty making decisions and maintaining concentration, or they tend to make more mistakes than usual after the loss⁽¹⁾

Psychological domain and women's age

Table (7) shows statistical significant differences between age groups and psychological main domain (P=0.006). This result is consistent with Annsofie& Per-Göranstudywho noted that the feeling lonely, dysphoria, which is emotional stress. It is often manifested in signs of remorse, irritability, sorrow, guilt, fear, and

hostility, followed by sadness and resignation. Less often there is anxiety, shame, and guilt, and jealousy showed in younger women as much grief as the older women and no differences in the expression of the intensity of the grief, irrespective of whether or not the women were younger, or had suffered a first miscarriage⁽¹⁾.

Psychological domain and women's gravidity:-

Table (8) shows statistical significant differences between women's gravid and psychological main domain (P=0.031).which mean primigravida and multigravida are the same when suffering from psychological effects of spontaneous abortion. This result in agreement with Adolffsson and Larsson, they have noted that there is no difference in the expression of the intensity of the grief, irrespective of whether or not the women are primiparous⁽¹⁾, While some of the earlier studies of psychological distress have found that having living children lessened distress, others did not find a relationship Claus, ⁽¹⁵⁾.

Recommendations:

1. Conduct Structured teaching programmed (STP) to pregnant women with history of miscarriage conducted by the investigator included meaning, causes, and prevention of miscarriage.
2. Reinforce the role of the psychological care for the women .in addition to physical care, by primary health center.

References:

1. Adolffsson A., and Larsson P.: **Applicability of general grief theory to Swedish women's experience after early miscarriage, with factor analysis of Bonanno's taxonomy, using the Perinatal Grief Scale.**(Ups) :Upsala Journal of Medical Sciences, August ,2010, 115(3), pp: 201–209.
2. Stacey L. Caswell: **Coping with Miscarriage, The Real Truth a magazine Plain Understanding**, 10 may, 2008. Available [online] at: [http:// www .the real truth.com](http://www.the-real-truth.com).
3. American College of Obstetricians and Gynecologists (ACOG): **Early Pregnancy Loss:**

Miscarriage and Molar Pregnancy in Pregnancy. Accessed on 10 Nov., 2011.Available [online] at [http:// www .acog.org](http://www.acog.org).

4. Norsker F. Nyboe ; Laura Espenhain; Sofie á Rogvi; Camilla Schmidt Morgen; Per Kragh Andersen, and Anne-Marie Nybo Andersen: **Socioeconomic position and the risk of spontaneous abortion: a study within the Danish National Birth Cohort. BMJ Open**, 25June,2012,2(3).Available at:[http:// www .ncbi. Nlm .nih.gov/pu](http://www.ncbi.nlm.nih.gov/pu)
5. Macassa G.; Ghilagaber G.; Bernhar E.; Diderichsen F, and Burström B.: **Inequalities in child mortality in Mozambique: differentials by parental socio-economic position.** J. Soc. Sci. Med., 2003, 57,pp: 2255–2264.
6. Banerjee B.: **Physical Hazards in Employment and Pregnancy Outcome.** Indian Journal of Community Medicine. April,2009, 34(2), pp:89-90. Available[online] at: [http:// www.IVSL.com](http://www.IVSL.com)
7. Sundari, T. : **Can health education improve pregnancy outcome? : Report of a grassroots action education campaign.** The Journal of Family Welfare. 15 March 2007,39(1), P: 1-12.
8. Family Health International, **“Egypt: The Social and Behavioral Outcomes of Unintended Pregnancy,”**,accessed on 25,Oct. 2009. Available[online]at: <http://www.fhi.org/en>.
9. Turner M.; Fattah C.; O'Connor N.; Farah N.; Kennelly M, and Stuart B.; **Body Mass Index and spontaneous miscarriage.** Eur. J. Obstet Gynecol., Aug 2010, 151(2, pp:1688-70.
10. Adolffsson A.: **Miscarriage Women's Experience and its Cumulative Incidence, Division of Obstetrics and Gynaecology, Department of Molecular and Clinical Medicine Faculty of Health Sciences, Linkping University, Sweden, 2006.**
11. Regan L, Rai, R. **Epidemiology and the medical causes of miscarriage.** ClinObstet Gynaecol, 2000; 14:p839.

12. Ghasemi N.; Sheikhha.M.; Davar.R., and Soleimani.S.; **ABO Bloods group incompatibility in recurrent abortion**. Iranian Journal of Pediatric Hematology Oncology. Received 16 January 2011, 1(2).
13. Neville F. Hacker; Joseph C. Gambone , and Calvin J. Hobel :**Essentials of Obstetrics and Gynecology**, 5th ed. , China, Elsevier Inc, 2010.
14. Kersting A. ; Wagner B. : **Complicated grief after perinatal loss**. *Dialogues Clinical Neuroscience*. June, 2012, 14(2), pp: 187–194.
15. Clauss D. Kerns: **Psychological Distress following Miscarriage and Stillbirth: An Examination of Grief, Depression and Anxiety in Relation to Gestational Length, Women's Attributions, Perception of Care and Provision of Information**. Doctor of Philosophy, Drexel University, January 2009.

