

Quality of Life for Women Suffering From Pain Regard Cesarean Section

Abeer Mohammed Yousef Ahamed , Shadia Hamido Mehaseb, Sahar Mossa Soliman

Maternity & Gynecological Nursing Department, Faculty of Nursing, Ain Shams University.

Abstract

Aim: the present study aimed to assess quality of life for women suffering from pain regard cesarean section **Design:** A Descriptive study design **Setting:** This study was conducted at postpartum unit at Ain Shams University Hospital. **Sample:** purposive sample included 200 primary cesarean section women. **Tool of data collection:** interviewing questionnaire sheet, visual analogue scale, and quality of life sheet. **Result:** the mean age of the studied women was 26.23 ± 4.01 years. The current result revealed that more than half of the studied women had severe pain post delivery within 20 minutes, 2 hours, 4 hours and 6 hours of operation respectively. Moreover, less than half of studied women had low level in physical domain while, more than half had moderate level in psychological domain. In addition, more than half of them had moderate level in social domain. There was statistically significance difference between socio-demographic characteristics and level of total score of quality of life **Conclusion:** women were young age, pain score was severe, the studied women had low physical, moderate psychological and social quality of life **Recommendation:** Developing awareness program for enhancing woman's knowledge regarding improving quality of life post cesarean section. **Further researches on,** identify factors affecting quality of life for cesarean section during postpartum period.

Key words: Cesarean section, postpartum, Quality of life, Pain

Introduction

Cesarean section (CS) is a surgical procedure used to deliver one or more babies. CS is usually performed when vaginal delivery will put the mother or child's health or life at risk. In recent years, the number of CS has risen worldwide. Since CS also involves risk for adverse outcome for both mother and child, concern has been expressed regarding its increased use (Oyewole *et al.*, 2014).

Cesarean section associated with increased risk of maternal morbidities

such as maternal admission to intensive care, blood transfusion and hysterectomy as well as increase length of stay in hospital, wound hematoma, postpartum cardiac complication, infection, and recovery is longer than vaginal delivery (Goldman *et al.*, 2013).

The postpartum period is the 6 weeks and it is the time of both psychological and physiological adjustment as the body returns to the normal, non-pregnant state (Ricci, 2013).

The postpartum period is a critical transition for women, which significantly affect the physical and mental health of

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women after childbirth and psychological problems, postpartum may interfere with the mother's ability to care for her baby and may affect the quality of life usually with various life changes such as lack of sleep (*Aktas et al., 2013*).

Quality of life is a multidimensional concept comprised of both positive and negative factors of life. The multidimensional aspect of is demonstrated in the numerous dimensions identified as part of the concept, including physical, psychological, social and spiritual (*Bahrani et al., 2014*). QOL is an important indicator of the quality of health care. Women's perception of health related quality of life is an essential measure of the quality and effectiveness of maternal and child health intervention (*Rezaei et al., 2016*).

Postoperative pain and difficulty with breast feeding are two main determinants of woman's negative QOL in early post cesarean period. Therefore, mothers who had cesarean section need more post-surgery pain relief drugs. Also, stress clearly can affect women strongly. Mothers who had CS had higher scores in somatic anxiety, muscular tension, and suspicion (*Kuguoglu et al., 2012*).

Nurse play a crucial role in the care for cesarean section women, goal of nursing care should help a woman to bond successfully with their new infants. Cesarean section women should develop an additional caring concerns immediately in the postpartum period, because they aren't only postpartum patient but post-surgical one. In addition to after pain site from their contracting uterus (*Pillitteri, 2014*).

Also, the nurse plays a role as an educator by providing support for mothers and provide information, education, psychological monitoring, and give practical advice to women. Good communication to explain what is considered to be normal physical,

psychological occurrence during the postnatal period (*Jayne, 2014*).

Aim of the study

The aim of this Study to assess quality of life for women suffering from pain regard cesarean section.

Research question

-Is the quality of life for women undergoing to cesarean section improved during postpartum period or not?

Subject and Methods

Subject and methods for this study were portrayed under four main designs:

Technical design
Operational design
Administrative design
Statistical design

1. Technical design:

The technical design for the study include: research design, setting subjects, and used for data collection relevant to the study.

Research design

A descriptive study

Setting of the study

The study was conducted at postpartum department in Ain Shams University Maternity Hospital. The researcher chooses this setting for the following reasons: availability of data collection.

Sampling Size

10% from total admission cesarean section (primipara) mother attend at postpartum department at Ain Shams University Maternity Hospital (200 case

of 2100 primary cesarean section women attend in year 2016).

Type

Purposive sample technique was used as all women with the following criteria were included in the study:

Inclusion criteria:

- Primipara
- Can read and write

Exclusion criteria

Any problems or History of psychological and medical health problem.

Tools of data collection

Three types of tools were used for data collection and conduction of the study, these consisted of: structured interviewing questionnaire, visual analogue pain scale and quality of life questionnaire.

1-Structure interviewing questionnaire: (Appendix II)

A constructed Arabic questionnaire sheet designated by the researcher after reviewing the related current literature. The questionnaire sheet was consisted of 13questions (open and closed questions), women had 15 minutes to fill it. It divided into two parts:

- **Part (A):** it covered the socio-demographic data including: e.g (age, education level, occupation, marital status, residence, income)

- **Part (B):** it covered obstetric history (number of abortion history, causes of cesarean section,...etc).

2-Visual analogue pain scale (Appendix III):

Visual analogue pain scale was used for assessing severity of pain. It is a standard tool having rating from 0 to 10 for evaluating severity of pain (*Carroll, 2011*) (*Khosravu & Moghadam, 2012*).

Scoring system

(0)- no pain

(1-4)-means mild pain

(4-7)-moderate pain

(7-10)- means sever pain in this scale.

3-Quality of life scale questionnaire: (Appendix IV) (question 1-36)

This tool adopted from Arabic version of Short from Health Survey (**SF-36**)(*WHO, 2014*) to assess quality of life of women undergoing cesarean section during postpartum period. It includes 36 statement assessing 8 scales of quality of life.

Physical functioning (5items), Physical role functioning (7 items), Body pain (3 items), General health (4 items), Vitality (energy/fatigue) (3 items), Emotional role functioning (4 items), Mental health (4 items), Social functioning (6 items). This items are related on five point likart scale. It modified to three point scale (0,1,2). (0)No, (1) Don't know, (2) Yes.

The targets of tool items includes physical, psychological and social domain. Questions related to physical domain from (1-19). Questions related to psychological domain from (20-30).Questions related to social domain from (31-36).

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❖ Scoring system

-Low (<50%) for No

The women's QOL total score was classified as the following:

-High: ($\geq 75\%$) for Yes

-Average: (50-<75%) for sometimes

Internal consistency reliability:

Cronbach's alpha for all domains

Content validity & reliability:

Tools were reviewed by jury (3 expertise's) in Obstetric- Gynecological specialty to test content validity and reliability of tools.

Variables	mean	SD	Alpha if item detected	Alpha	validity
Physical domain	14.760	11.613	0.797	0.942	.996**
Psychological domain	8.560	6.515	0.693	0.964	.993**
Social domain	3.160	2.733	0.895	0.785	.953**

Ethical consideration

Research ethics was considered and maintained during the study through the following:

- 1-Women was informed that they are allowed to choose to participate or not in the study and they have the right to withdraw from the study at any time.
- 2- The researcher clarifying the aim of the study to the women included in the study.
- 3-The researcher assured that confidentiality of the subject data was maintained.
- 4-The proposal reviewed and approved by the faculty ethics committee.

Operational design:

The operational design for the study included preparatory phase, content validity, pilot study and field work.

Preparatory phase

Field work

- The study was conducted in the period ranging from the first of

Review of the current, past local and international related literature using books, articles, internet, and magazines. This review helped the researcher to be acquainted with magnitude and incidence of the problem and guided the researcher to prepare data collection tools.

Pilot study

A Pilot study carried out on 10% of total sample (20) women to evaluate the relevance, clarity and content validity of the tools used for data collection, evaluate time needed for women to fill tools of the study and find the possible obstacles and problems that might face researcher and interfere data collection. Subjects included in the pilot study were excluded study sample.

Novemberto the end of April ranging from 3 day per week for six months from.

- Data was collected during morning shift for postpartum unit, 3days /week, including all women who have the previous inclusion criteria through using study tools by the researcher.

- Approval from women is obtained orally before starting the interview after explaining the purpose of the study.

- The researcher completed the questionnaire by interviewing each woman individually.

- Visual analogue pain scale was used to assess degree of pain immediately after cesarean section then after 20 minutes then after 2,4,6 and 12 hours post cesarean section.

- Then, took an appointment from participants during postpartum period to assess the quality of life for participants by using quality of life measurement tool, this second tool took 15-20 minutes approximately.

- Women physical, psychological, social domains were assessed to assess the quality of life of cesarean section women.

Limitations of the study:

- Some women refused to communicate because of anxiety and pain of cesarean section operation.

- Some women refused to give their telephone number (**5women**).

3- Administrative design

An official approval with written letter clarifying the title, purpose and setting of the study was obtained from dean of faculty of nursing at Ain Shams maternity university. Another letter was send to director of Ain Shams maternity university hospital as an approval for data collection to conduct this study.

4-Statistical design

Data was verified prior to computerized entry. The statistical package for social science (SPSS version 20) was used for that purpose, followed by data tabulation and analysis. Descriptive statistics were applied (e.g mean, standard deviation, frequency, percentages). Qualitative variables were compared using chi-square test. Statistical significance was considered when p-value <0.05, and a highly significant level value was considered when p<0.001.

Results

The present study was descriptive research aimed to assess quality of life for women suffering from a pain regard cesarean section in Ain Shams university maternity hospital .To achieve the goal of the study the results were presented four parts according to the following parts:

Part I: This part is concerned with the socio demographic characteristics for studied women Table (1)

Part II: This part is concerned with pain assessment of the studied women Table (2)

Part III: This part is concerned with assessment quality of life domain Table (3)

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Part IV: This art is concerned with Relation between total level of women's Quality of life and post cesarean pain (n=200).Table (4)

Table (1): Distribution of the studied sample according to their socio-demographic characteristics.

Demographic characteristics	n=200	
	N	%
Age (years)		
20<25	73	36.5
25<30	94	47
30<35	22	11
≥35	11	5.5
Mean± SD	26.23±4.01	
Level of education		
Read and write	11	5.5
Basic education	23	11.5
Secondary education	115	57.5
University education	51	25.5
Occupation		
Working	57	28.5
Housewife	143	71.5
Residence		
Rural	160	80
Urban	40	20
Marital status		
Married	195	97.5
Divorced	3	1.5
Widow	2	1
Income		
Sufficient	92	46
Not sufficient	108	54

Table (1): shows that, less than half of the studied women,(47%) were 25<30 years old with mean age 26.23±4.01 years old. As regards educational level, more than half of them 57.5% had secondary education. Concerning occupation, more than two thirds of them, 71.5% were housewife. As residence 80% live in rural areas and more than half of the study sample, 54%their income were not enough.

Part (II): Pain assessment of the studied women

Table (2): Distribution of the studied sample according to post cesarean pain.

Pain	N=200	
	N	%
Immediately after operation		
No pain (0)	26	13
Mild (1<4)	56	28
Moderate (4<7)	104	52
Severe (7<10)	14	7
After 20 minutes of operation		
No pain (0)	20	10
Mild (1<4)	24	12
Moderate (4<7)	50	25
Severe (7 <10)	106	53
After 2 hours of operation		
No pain (0)	0	0
Mild (1<4)	8	4
Moderate (4<7)	78	39
Severe (7 10)	114	57
After 4 hours of operation		
No pain (0)	0	0
Mild (1<4)	0	0
Moderate (4<7)	86	43
Severe (7 <10)	114	57
After 6 hours of operation		
No pain (0)	0	0
Mild (1<4)	10	5
Moderate (4<7)	88	44
Severe (7< 10)	102	51
After 12 hours of operation		
No pain (0)	0	0
Mild (1<4)	36	18
Moderate (4<7)	98	49
Severe (7 <10)	66	33

Table (2): shows that more than half of study women 52% had moderate pain (4<7) immediately after the operation, while after 20 minutes, 2, 4 and 6 hours of operation 53%, 57%, 51% respectively of them had severe pain(7<10).

Table (3): Distribution of the studied women according to quality of life.

Quality of life items	n=200	
	N	%
Physical domain		
Low	85	42.5
Moderate	67	33.5
High	48	24
Psychological domain		
Low	50	25
Moderate	113	56.5
High	37	18.5
Social domain		
Low	15	7.5
Moderate	106	53
High	79	39.5

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Table (3): Shows that less than half of the studied women, 42.5% had low level in the physical domain. While, more than half of them, 56.5% had moderate level in the psychological domain and more than half of them, 53% had moderate level in the social domain.

Table (4): Relation between total level of women's Quality of life and post cesarean pain (n=200).

Post cesarean pain	Total	quality of life			X ²	p-value
		Low n=99	Moderate n=80	High n=21		
	N	N	N	N		
Immediately after operation						
No pain	26	0	7	19	203.321a	<0.05
Mild	56	7	48	1		
Moderate	104	78	25	1		
Severe	14	14	0	0		
After 20 minutes of operation						
No pain	20	0	6	14	205.686a	<0.05
Mild	24	0	18	6		
Moderate	50	7	43	0		
Severe	106	92	13	1		
After 2 hours of operation						
No pain	0	0	0	0	148.116a	<0.05
Mild	8	0	1	7		
Moderate	78	7	58	13		
Severe	114	92	21	1		
After 4 hours of operation						
No pain	0	0	0	0	106.385a	<0.05
Mild	0	0	0	0		
Moderate	86	7	59	20		
Severe	114	92	21	1		
After 6 hours of operation						
No pain	0	0	0	0	183.633a	<0.05
Mild	10	0	2	8		
Moderate	88	7	69	12		
Severe	102	92	9	1		
After 12 hours of operation						
No pain	0	0	0	0	139.593a	<0.05
Mild	36	0	17	19		
Moderate	98	40	57	1		
Severe	66	59	6	1		

*Significant at p. value <0.05

Table (4): Indicates that, there was negative significant relation between total level of women's quality of life and post cesarean pain.

Discussion

The aim of the current study was to assess the quality of life for women

suffering from pain regard cesarean section.

Concerning general characteristics of the studied women of the present study, revealed that near to half of mothers in aged 25to30 years and mean age were (mean \pm SD 26.23 \pm 4.01).This age group represents the most prevalent reproductive age groups and reflect the fact that women undergoing CS were likely to be the middle age group. This finding was supported by *Moges et al. (2015)* in their study about": Prevalence and Outcome of Caesarean Section in Attat Hospital" The study showed the majority of the women were between 20-35 years. Also, these results were consistent with *Dube& Kshirsagar, (2014)* who found that most of the cesarean section was between 20-35 years.

Regarding the educational level, the study revealed that more than half of the studied women had second education.This finding matched with *Hashad, (2017)* in Banha, the study about "assessing the quality of life among women undergoing elective cesarean section versus emergency cesarean section" the study clarified that the majority of women had secondary education.

As regards residence and occupation, the majority of studied women were housewives and living in rural areas. This finding was supported by *Rezaei et al. (2016)* in Iran in a study about "Maternal Health-Related Quality of Life and Its Predicting Factors in the Postpartum Period", who clarified that the majority of women were housewife. This due to housewife hadn't an opportunity to share experience with others than working women.

As regards marital status and income, the majority of the studied women were married and not enough income. This finding was supported by *Oliveria et al. (2015)* who found that the

majority of women were married and less than half of women have not enough income.

Regarding the level of pain, the current study showed that more than half of the studied women had severe pain, after 20 minutes,2,4, and 6 hours of operation. This may be due to cramping and contraction of the uterus after cesarean section, pain from the site of incision, walking and rolling over the bed. This finding agrees with *(Kalagc,2011)*who studied pain after cesarean section and found that chronic pain after labor and delivery remain high, as prevalence rates of chronic pain after cesarean section between 6 and 18%.The woman needs support and provision of practical help in caring for themselves and their children when pain and fatigue may limit their ability to carry out the regional task. Pain leads to the reduction of quality of life after cesarean surgery; it may also disturb the individual's.

The current study indicated that there was negative significant relation between total level of women's QOL and post cesarean pain. The majority of studied women had severe pain. This may lead to the reduction of quality of life after cesarean surgery; it may also disturb the individual's life. This result was in agreement with *Majzoobi et al. (2014)*, who reported that mothers with cesarean childbirth demonstrated a very slow improvement in the quality of life; their slow recovery was caused by chronic pain.

Conclusion

Based on the finding and research question of the present study it was concluded that women had lowphysical, moderate psychological and social quality of life. Finally, it was cleared that findings answered research question and achieved aim of the study.

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Recommendation

According to the findings of the present study, the following suggestions are recommended.

- Raising awareness among pregnant women regarding issues of postpartum period using all available mass media as (posters, and brochure).

- Developing awareness program for enhancing woman's knowledge regarding improving quality of life post cesarean section.

- Dissemination of pamphlet in maternity department regarding health related quality of life.

Further studies need to be performed:

○ Identify factors affecting quality of life for cesarean section during postpartum period.

○ Effect of postnatal follow up on quality of life.

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