

Comparison of the Weight Gain during Pregnancy with Weight Loss in the Immediate Postpartum Period

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Abstract

Background: Approximately, the mother will gain 11 - 12 kgs of weight during their pregnancy. The mother will lose around 4.5 kgs of weight after giving birth to the baby. The weight change of the mother is necessary to know before and after delivery.

Aim: The aim of the study was to compare the weight gain of the mother during pregnancy with the weight loss of the mother during first day of postnatal period among mothers admitted in selected hospital, Puducherry.

Subjects and Methodology: A comparative study was conducted among mothers who gave birth to the baby in selected hospital, Puducherry. Sample size was 50, selected through purposive sampling technique. The quantitative approach and descriptive design was used in this study. The data was collected through interview schedule from the subjects regarding their demographic and obstetrical variables and a checklist was used for finding the weight of the mother during pregnancy and weight after delivery.

Result: The result reveals that, 25 (50%) mothers had weight loss about 2 - 4 Kg, 23 (46%) mothers had lost 5 - 6 Kg of weight and 2 (4%) mothers had lost 6 Kg of weight during their first day of postnatal period. The mean score and the standard deviation of the level the weight loss of the mother during first day of postnatal period was (4.56+1.33).

Conclusion: From this study the researcher concluded that, the average weight loss among the postnatal mothers was about four to five kilograms after delivery.

Keywords: *Weight Gain; Loss of Weight; Postnatal*

Introduction

The constant phenomenon during pregnancy is the weight gain in the variable amount. An average amount of weight gain during pregnancy is 11 kg consists of baby, placenta and fluids [1]. The estimated weight gain presented from the various studies was about the range of 10.7 to 15.2 kg [2].

Puerperium is the period following the childbirth and it was considered as a fourth trimester where the tissues in the body, especially the "pelvic organs" revert back into the pre-pregnant state. The changes will take place in anatomically, physiologically as well as psychologically [3].

Most of the women during pregnancy will be concerned about their weight. As the baby grows, the weight gain at moderate level is normal. Approximately, all the women lose their pregnancy weight at the time of 6 weeks of postpartum period. Although some of the mothers will gain weight after the 6 weeks of postnatal period [4,5]. The excessive weight will be lost after the delivery process to pre-pregnancy weight of the mother [5].

The important predictors for weight retention during postpartum are excessive gestational weight gain, pregnancy body mass index and breast feeding was the contributing factor for the weight loss [6-11].

Immediately after the delivery of the baby, the period of postpartum has begins and extends upto 6 weeks were the mother’s body, uterine size and hormonal level will revert back into the pre-pregnant state. Instantly after the delivery, the mother will lose, 4.5 kilograms of weight along with 0.9 kilograms of blood and amniotic fluid. During the first week of postnatal period mother will lose 3 to 5 pounds of water weight [12]. The retention of weight after pregnancy was about more than or equal to 5 kg among 20% of women [13].

Objectives of the Study

- To assess the weight loss of the mother during first day of postnatal period.
- To compare the weight of the mother during pregnancy and weight loss during first day of postnatal period.
- To associate the weight before delivery and weight loss of the mother after delivery.

Methodology

The present study was aimed at assess the weight loss of the mother during first day of postnatal period. In order to achieve the study objectives, a quantitative research approach and the descriptive research design was used in this study [14]. The research variable of this study was weight of the mother. The study was conducted in a selected hospital at Puducherry. The population comprises of the mothers who have delivered in selected hospital at Puducherry. The mothers were selected according to the inclusion criteria. The sample size comprised of 50 mothers. The process of selection of sample from the entire population is considered as sampling technique. Purposive sampling technique was used in this study, the mothers who were in the first day of postnatal period were selected. Inclusion criteria of this study were 1. Mothers who were present at the time of data collection. 2. Mothers who were willing to participate. 3. Mothers who were in first day of postnatal period. The tool was divided into two sections. Section A: consists of demographic and obstetrical variables of the mothers including name, age, religion, gravida, Last menstrual period, sex of the baby, weight of the baby. Section B: consists of checklist to assess the weight of the mother during pregnancy and weight of the mother during first day of the postnatal period. Data was collected from each mother after obtaining individual consent. Mothers were introduced about the study and researcher was collected the information by interview schedule. The weight of the mother during pregnancy was taken from the case sheet and weight at present (on the first postnatal day) was assessed by checking mother’s weight by weighing machine.

Results

The result describes that, 32 (64%) mothers belongs to the age group of 21 - 25 years, 49 (98%) mothers belongs to Hindu religion, 27 (54%) mothers primigravida, 26 (52%) babies were male and 40 (80%) mothers had the baby with normal weight (Table 1).

Sl. No	Demographic and obstetrical variables	Frequency (n)	Percentage (%)
1	Age (in years)		
	21 - 25 years	32	64
	26 - 30 years	16	32
	Above 30 years	2	4
2	Religion		
	Hindu	49	98
	Christian	1	2
	Muslim	0	0
3	Gravida		
	Primi	27	54
	Multi	23	46
4	Sex of the baby		
	Male	26	52
	Female	24	48
5	Weight of the baby		
	Very low birth weight	2	4
	Low birth weight	40	80
	Normal weight	8	16

Table 1: Distribution of Demographic and obstetrical Variables among mothers (N = 50).

The result reveals that, 25 (50%) mothers were lost 2 - 4 Kg of weight, 23 (46%) mothers had lost 5 - 6 Kg of weight and 2 (4%) mothers had lost 6 Kg of weight during their first day of postnatal period. The mean score and the standard deviation of the level the weight loss of the mother during first day of postnatal period was (4.558+1.327) (Figure 1).

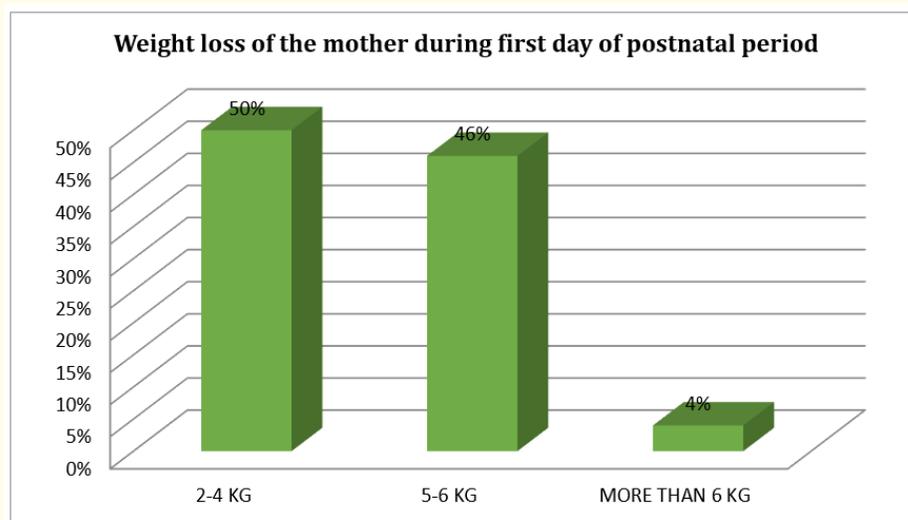


Figure 1: Distribution of level of the weight loss of the mother during first day of postnatal period.

The result shows that, the mean score for Pregnancy weight was 61.50± 10.55 and during the first day of post-natal period was 57.13 ± 10.30. The calculated paired 't' test value of t = 16.481 shows that highly significant at p < 0.001 level for the comparison of the Pregnancy weight and weight during first day of postnatal period respectively (Table 2)

Comparison of the pregnancy weight and first day of post-natal weight	Mean	Standard Deviation	't' Value	'p' Value
Pregnancy weight	61.50	10.55	16.481	.001**
First day of post-natal weight	57.13	10.30		

Table 2: Comparison of the Pregnancy weight and weight during first day of postnatal period among the mothers. **-p < 0.001 highly significant.

In relation to the association it showed that none of the variables are associated with the weight loss during postnatal period.

Discussion

The result of the present study showed that, the majority of 32 (64%) mothers belongs to the age group of 21-25 years, 49 (98%) mothers belongs to Hindu religion, 27 (54%) mothers are in primigravida, 26 (52%) babies were in the sex of male and 40 (80%) mothers had the baby with normal weight. the present study supported with the study conducted by Chang T reported that, the mothers who are at the age group of 15 to 25 are higher risk for gaining more weight during pregnancy [15].

The result reveals that, 25(50%) mothers were lost 2 - 4 Kg of weight, 23 (46%) mothers had lost 5 - 6 Kg of weight and 2(4%) mothers had lost 6 Kg of weight during their first day of postnatal period. The mean score and the standard deviation of the level of weight loss of the mother during first day of postnatal period was (4.558+1.327). The present study supported with the study conducted by Debra T. Crowell reported that, the mothers who are gaining excessive weight during antenatal period are more risk at weight retention during postnatal period [16].

The result shows that, the mean score for Pregnancy weight was 61.50 ± 10.55 and for the first day of postnatal period was 57.13 ± 10.30 . The calculated paired 't' test value of $t = 16.481$ shows that highly significant at $p < 0.001$ level for the comparison of the Pregnancy weight and weight during first day of postnatal period respectively.

Conclusion

From this study the researcher concluded that, the mothers have gained weight during pregnancy will be lost after delivery. Most of the mothers who have delivered in selected hospital, Puducherry had lost upto four to five kilograms of weight.

Recommendation

Based on the result of the study and the experience of the researcher the following recommendations are made:

- A study can be conducted for the longer period to make the study result more efficient.
- A sample size can be increased to generalize the study findings.
- The study can be conducted in a community area with complementary therapy to reduce the weight retention of the mothers during puerperium.

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