

## EVALUATION OF THE FUNCTIONAL STATUS OF WOMEN AFTER THEIR DELIVERY OF CHILD FACTORS AFFECTING IT

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### SUMMARY

**Purpose:** The functional status of women is the mother's readiness to assume infant care, resume self care, housework, social, communal, occupational activities following their giving birth. The recovery of the preconception functional status takes a longer time than healing physiologically. This study was conducted descriptively and analytically to determine the functional status of the women who gave birth and the factors affecting this status.

**Material and methods:** The sample group of this descriptive and analytical study consists of total 200 women 15 (n=100) in Antalya city center, and registered to community clinic 18 (n=100), who were on the sixth week of postpartum period after giving birth either vaginally or by cesarean section, accepted to take part in the study.

**Findings:** It was determined in this study that age, educational level, family type, type of delivery, number of children, and planning pregnancy are the important factors that affect postpartum functional status. It was found that the women who did not receive support to revert back to their functional status and their DSFD points were higher. In general, it was found that although their DSFD points increased over the time after delivery, their functional status before delivery could not be reached even in six months after delivery.

**Results:** for the women after giving birth to recover to their Functional status lasts longer than six weeks. To give the women the care they need in this period with a holistic approach will help them to adapt postpartum period more easily.

**Key words:** Postpartum period, the functional status after giving birth, the Inventory of functional status after childbirth  
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### KADINLARIN DOĞUM SONRASI FONKSİYONEL DURUMLARI VE ETKİLEYEN FAKTÖRLERİN BELİRLENMESİ

#### ÖZET

**Amaç:** Doğum sonrası dönemdeki fonksiyonel durum, annenin bebeğinin bakım sorumluluğunu, kendi öz bakımını, ev işlerini, sosyal, toplumsal ve mesleki aktivitelerini üstlenmeye hazır olmasıdır. Kadınların doğum öncesi fonksiyonel durumlarına geri dönüşleri, fizyolojik iyileşmeden daha uzun zaman almaktadır. Bu çalışma doğum yapan kadınların doğumdan sonra fonksiyonel durumlarını ve etkileyen faktörlerini belirlemek amacıyla tanımlayıcı ve analitik olarak yapılmıştır.

**Gereç ve yöntemler:** Araştırmanın örneklem grubunu, miadında vajinal veya sezaryenle doğum yapan, doğum sonrası altıncı haftada bulunan, araştırmaya katılmayı kabul eden, Antalya il merkezindeki 15 (n=100) ve 18 no'lu (n=100)

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sağlık ocaklarına kayıtlı toplam 200 kadın oluşturmuştur. Veri toplama aracı olarak, sosyodemografik özellikleri ve doğum öyküsünü içeren "Kişisel Bilgi Formu" ve Doğum Sonrası Fonksiyonel Durum Envanteri (DSFDE) kullanılmıştır.

**Bulgular:** Bu çalışma ile yaşın, eğitim durumunun, aile tipinin, doğum şeklinin, çocuk sayısının ve gebeliğin planlanma durumunun doğum sonrası fonksiyonel durumu etkileyen önemli faktörlerden olduğu ortaya çıkmıştır. Bebek bakımında ve ev işlerinde yardım almayan kadınların fonksiyonel durumlarına daha erken döndükleri ve DSFD puan ortalamalarının daha yüksek olduğu belirlenmiştir. Genel olarak doğum sonrası ilerleyen zamanla birlikte kadınların DSFD'nin da arttığı ancak altıncı ayda bile hala doğum öncesi fonksiyonel durumlarına tamamen geri dönemedikleri saptanmıştır. **Sonuç:** Kadınların doğumdan sonra fonksiyonel durumlarına geri dönüşleri fizyolojik iyileşme süresi olan altı haftadan daha uzun sürmektedir. Kadınlara bu dönemde gereksinim duydukları bakımın bütüncül bir yaklaşımla verilmesi doğum sonrası döneme daha kolay uyum sağlamalarını etkileyecektir.

**Anahtar kelimeler:** doğum sonrası dönem, doğum sonrası fonksiyonel durum, doğum sonrası fonksiyonel durum envanteri  
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## INTRODUCTION

Postpartum period is the adaptation period whereby a new order is established because of a new member joining the family for a family<sup>(1)</sup>. It is a transition period during which she has to adapt to postpartum disorders, a new system in the family, and the body image changes for a mother<sup>(2)</sup>. The first few months after birth is a hard time period for the mothers who give birth for the first time. They need special talents and energy for learning their new tasks in this period. During this period, the mother tries to be acquainted with her newborn baby and meet its needs. In order for the mother and baby to sustain a successful relationship, the mother's health status, role ambiguity, their feeling of isolation, the relationship between the father and the baby, the mother's body image, mother's emotions on whether she feels herself effective enough on meeting baby's needs and care may be important factors<sup>(3-5)</sup>. Spouses, friends, relatives that is natural social support resources may affect the transition to the role of motherhood positively<sup>(1)</sup>.

Post partum period was described as a process whereby there may be a lot of problems encountered by both the women and their families, and functional status may change in some studies done<sup>(6)</sup>. Functional status in postpartum period is the one that the mother must be ready for taking the responsibility of her baby's care, her own care, housework, and social, communal, and occupational activities. Identifying the postpartum recovery period is traditionally focused on the genital organs recovery and physical accordance. Very little attention has been drawn to the social and psychological

aspects at the postpartum period recovery<sup>(7-11)</sup>.

Postpartum care, which has an important place within the mother-child health services, is basically a preventive health service. Women benefit from the before-birth period health care service more than the postpartum period in general<sup>(12,13)</sup>. Postpartum follow ups are made three times in total which are the 48<sup>th</sup> hour, the 15<sup>th</sup> and 40<sup>th</sup> days following the birth according to Ministry of Health in our country<sup>(14)</sup>.

Purpose of the quality follow up after birth is to provide new parents to experience the period affirmatively both physical and psychological as possible as in their expectations, to make a supporting environment at home, to support the family in crises situations and accelerate the recovery of the woman's functional status. Evaluations after birth are very important for these reasons<sup>(15,16)</sup>. Adaptation of mother in postpartum period is an important matter that is affecting mother's own health and functional status recovery back to before pregnancy as well as the child's and the family's health<sup>(17)</sup>.

Besides the women's care before birth, their postpartum care and recovery back to functional status before pregnancy is rather important for the mother's, the child's and the family's health. For this reason, first it is necessary to determine how women's postpartum functional status is changing in time and what the affecting factors are. It should not be focused only on the women's postpartum physical changes but on the resolutions of the relatively long termed social and psychological problems. There are a few studies subjecting the postpartum functional status in our country and they are limited with only the physical recovery period which is six weeks after birth<sup>(10,11,18)</sup>.

Thereby, it is vitally important to discover how the postpartum functional status recovery affects the woman and her family, to determine how the functional status develops in time and what affects the functional status and to create a source and guide the health care personnel. It is purposed to determine the women's postpartum functional status and affecting factors with this research.

## MATERIAL AND METHODS

### Data Gathering

This research has been done descriptively and analytically to determine the women's functional status and affecting factors. This research's universe has scoped 54 Health Care Center within Antalya Province of Turkey. Sampling of this research is composed of the women who were at the sixth week after giving birth registered to the randomly selected Health Care Centers numbered as 15 and 18 of those 54 Health Centers.

Size of the sample has been calculated using 184 women in regard with the 95% confidence bounds and %5 sampling mistakes by using formula of sample size calculation when the universe is known; hence, the size of sample has been rounded up to 200 women to increase the strength of the research<sup>(19)</sup>.

Considering the Pregnant Monitoring Forms, women who had given either vaginal or caesarean section operation birth at the exact time, at the sixth week after birth, with no mental deficiencies and chronic disease or disabilities as well as their new born, volunteered and at least primary school graduates have been taken into the scope of this research.

To carry out this research, permission has been granted from Antalya Provincial Health Directorate and Mediterranean University's Ethics Committee. The objective of the research has been explained to the women who volunteered and their oral and written confirmation was granted.

### Means of the Data Gathering

Personal Information Form and Inventory of Functional Status after Childbirth (IFSAC) were used as the data gathering mean. Data were collected by face-to-face interview technique. Data were collected at three phases. At the first phase, women in the sixth week

after giving birth were applied with the questionnaire form consisting of the descriptive characteristics and IFSAC together. At the second and third phase, same women were applied with IFSAC in the 3rd and 6th months after birth. Since the data gathering is consisted of three phases, participants were given assurance that their names, last names, addresses and phone numbers would remain confidential.

### Personal Information Form

There are some questions about the participants' social-demographic characteristics, birth history, the way they feed their babies, work status and whether they have support for child care or works in this questionnaire form which was prepared based on the technical literature by the researchers<sup>(7,8,18,20-22)</sup>.

### Inventory of Functional Status after Childbirth (IFSAC)

Original of the scale was developed by Fawcett et al (1988) (Inventory of Functional Status after Childbirth), and its validity and reliability study was made by Ozkan and Sevil (2004) in our country<sup>(7-10)</sup>.

IFSAC provides us with determining the primary, secondary and tertiary roles of women in the postpartum period. This scale does not measure the women's senses about the motherhood roles such as role conflicts, role uncertainties and over-responsibilities, but it is restricted with determination of the role functions<sup>(10)</sup>.

To determine the postpartum recovery, IFSAC is composed of five sub-dimensions with house activities (items 1-12), social and public activities (items 13-18), baby care activities (items 19-24), and self care activities (25-32), professional activities (items 33-36). IFSAC items, which are composed of 36 items in total, are evaluated over 4 points<sup>(1-4)</sup>. Answers show that there is a gap between the beginning of an activity and at the time of fulfillment of the full capacity which will perform the activity. Since all women cannot answer each items of IFSAC, average points were calculated for each sub-scale and total score. The higher points indicates that the functional status is also high<sup>(10,11)</sup>.

In the research, scale's Cronbach Alpha internal coherence reliability was found as 0.92 for the activities in house, as 0.93 for social and public activities, as 0.50 for baby caring responsibilities and as 0.61 for self caring activities. Total Inventory of Functional Status after Childbirth coefficient is determined as 0.92.

### Data Analyzing

Numbers, percentage, Cronbach Alfa, Significance Test of Difference between Two Averages, Mann-Whitney U Test and One Way Variance Analysis's were used in this research. Statistical meaningfulness is described with  $p < 0.05$ . Since group number is too high at the comparison of three different time periods (6<sup>th</sup> week, 3<sup>rd</sup> and 6<sup>th</sup> months) that may increase the mistake possibility, Bonferroni correction was applied when analyzing the data. Bonferroni correction is determined by the formula of  $\alpha/k$  (meaningfulness level/group number). Since the Bonferroni correction and group number is 3, the meaningful level is determined  $0.05/3=0.016$  when comparing the groups at the very end of this research. Therefore, meaningfulness level at one way variance analysis which is used for testing difference between time periods is considered as 0.01.

### FINDINGS

200 women who gave birth have participated in the research. Average age of the women is  $27.7 \pm 4.77$ . It was determined that 42 % of the women were primary school graduates, 96.5% of them had social security, 59.5 % of those income were less than their expenses and 90.5 % of them had immediate family, more than half of the women (52%). 5 gave their birth with caesarean section operation and 43 % of them had their first baby, 86.5 % had their baby voluntarily and 87 % of them fed their baby with mother's milk. It was also determined that half of the women (50 %) had support with baby care and house works (Table I).

When the IFSAC point average is examined in regard with the women's age and education status, it is observed that functional status of women increases as the age goes higher. It is determined that women who are primary school graduates show higher functional status than the others at the 6<sup>th</sup> week after birth; at the 3<sup>rd</sup> month, the women who have university degree or more show higher functional status and that situation continues at the 6<sup>th</sup> month as indicated. ( $p < 0.05$   $F=18.56$ ,  $p < 0.05$   $F=6.595$ ), (Table II).

**Table I:** Scattering characteristics of the women.

Defining characteristics	Number	%
<b>Age</b>		
Age of 18- 24	52	26.0
Age of 25- 29	75	37.5
Age of 30 and over	73	36.5
<b>State of education</b>		
Primary school	84	42.0
Secondary school and high school	73	36.5
University and over	43	21.5
<b>Social assurance</b>		
Yes	193	96.5
No	7	3.5
<b>Income status</b>		
Income is less than expenditure	119	59.5
Income is equal to expenditure	81	40.5
<b>Family type</b>		
Nuclear family	181	90.5
Extended family	19	9.5
<b>Delivery method</b>		
Vaginal	95	47.5
Cesarean	105	52.5
<b>Çocuk sayısı</b>		
1	86	43.0
2	83	41.5
3 or over	31	15.5
<b>Hep during child care and hose</b>		
Yes	173	86.5
No	27	13.5
<b>Help during child care and hose work</b>		
Helped	100	50.0
Not helped	100	50.0
Total	200	100

Though the functional status point average of all activities at the 6<sup>th</sup> week is higher with the women who gave vaginal birth; depending upon the birth mean, it is seen that IFSAC point average has a meaningful difference ( $p < 0.05$ ;  $t=3.35$ ) in only the baby care responsibilities and that difference ( $p < 0.05$ ;  $t=3.35$ ) continues at the 3<sup>rd</sup> month. At the 6<sup>th</sup> month, self care activity point average of those women who gave birth by caesarean section operation is found meaningfully higher. ( $t=3.81$ ), ( $p < 0.05$ ;  $t=-2.41$ ) (Table III).

As the child number increases, it was seen that average point of self care activity sub-dimension decreases. Child number made a significant difference at in house activity, self care activity and total IFSAC score averages ( $p < 0.05$ ;  $F=14.15$ ,  $p < 0.05$ ;  $F=5.746$ ,  $p < 0.05$ ;  $F=4.276$ ), (Table III).

At the 6<sup>th</sup> week, it is determined that score averages of the women whose answer were "yes" to the question of whether she wished to have baby was higher in all

**Table II:** Scattering average points of the postpartum functional status inventory according to age and education status to women (n=200).

	n	Domestic (in family) $\bar{X}\pm SS$	Social and Communal $\bar{X}\pm SS$	Baby care $\bar{X}\pm SS$	Self care $\bar{X}\pm SS$	Professional $\bar{X}\pm SS$	Total DSFDE $\bar{X}\pm SS$
<b>Age group*</b>							
<b>6<sup>th</sup> week</b>							
Age of 18-24	52	2.44±0.56	2.04±0.78	3.69±0.26	3.34±0.27	-	2.96±0.36
Age of 25-29	75	2.76±0.53	1.93±0.70	3.87±0.16	3.44±0.16	-	3.15±0.28
Age of 30 and over	73	2.93±0.50	1.99±0.75	3.94±0.16	3.43±0.15	-	3.23±0.27
<b>Test and P values</b>		sd=2; 197 F= 12.85 <b>p&lt;0.05</b>	sd=2; 197 F= 0.319 p>0.05	sd=2; 197 F= 24.64 <b>p&lt;0.05</b>	sd=2; 197 F= 0.471 p>0.05		sd=2; 197 F= 24.64 <b>p&lt;0.05</b>
<b>3<sup>rd</sup> month</b>							
Age of 18-24	52	3.59±0.23	3.71±0.46	3.97±0.07	3.69±0.09	-	3.71±0.13
Age of 25-29	75	3.65±0.19	3.75±0.44	3.99±0.04	3.71±0.09	-	3.75±0.10
Age of 30 and over	73	3.63±0.20	3.74±0.44	3.99±0.33	3.68±0.11	-	3.74±0.10
<b>Test and P values</b>		sd=2; 197 F= 2.075 p>0.05	sd=2; 197 F= 0.102 p>0.05	sd=2; 197 F= 4.313 <b>p&lt;0.05</b>	sd=2; 197 F= 1.500 p>0.05		sd=2; 197 F= 2.126 p>0.05
<b>6<sup>th</sup> week</b>							
Age of 18-24	52	3.89±0.09	3.98±0.14	4.00±0.00	3.78±0.08	-	3.89±0.05
Age of 25-29	75	3.90±0.08	4.00±0.00	4.00±0.00	3.81±0.07	-	3.90±0.04
Age of 30 and over	73	3.94±0.07	4.00±0.00	3.99±0.02	3.79±0.08	-	3.91±0.04
<b>Test P değerleri</b>		sd=2; 197 F= 7.332 <b>p&lt;0.05</b>	sd=2; 197 F= 1.429 p>0.05	sd=2; 197 F= 0.869 p>0.05	sd=2; 197 F= 2.285 p>0.05		sd=2; 197 F= 4.512 <b>p&lt;0.05</b>
<b>Education status*</b>							
<b>6<sup>th</sup> week</b>							
Primary school	84	2.81±0.53	1.95±0.79	3.90±0.21	3.39±0.22	-	3.16±0.32
Secondary school and high school	73	2.68±0.53	2.07±0.61	3.81±0.23	3.40±0.19	-	3.09±0.30
University and over	43	2.70±0.64	1.89±0.86	3.83±0.22	3.47±0.15	-	3.12±0.34
<b>Test and P values</b>		sd=2; 197 F= 1.158 p>0.05	sd=2; 197 F= 0.858 p>0.05	sd=2; 197 F= 4.219 <b>p&lt;0.05</b>	sd=2; 197 F= 2.534 p>0.05		sd=2; 197 F= 0.783 p>0.05
<b>3<sup>rd</sup> month</b>							
Primary school	84	3.62±0.22	3.70±0.46	3.99±0.04	3.67±0.10	-	3.72±0.12
Secondary school and high school	73	3.63±0.18	3.74±0.44	3.98±0.05	3.69±0.09	-	3.74±0.10
University and over	43	3.67±0.20	3.79±0.41	3.98±0.05	3.73±0.10	-	3.76±0.11
<b>Test and P values</b>		sd=2; 197 F= 0.921 p>0.05	sd=2; 197 F= 0.571 p>0.05	sd=2; 197 F= 0.470 p>0.05	sd=2; 197 F= 4.582 <b>p&lt;0.05</b>		sd=2; 197 F= 2.035 p>0.05
<b>6<sup>th</sup> month</b>							
Primary school	84	3.91±0.08	4.00±0.00	4.00±0.00	3.77±0.08	-	3.89±0.04
Secondary school and high school	73	3.90±0.08	3.99±0.12	3.99±0.02	3.80±0.07	-	3.90±0.04
University and over	43	3.92±0.08	4.00±0.00	4.00±0.00	3.85±0.06	-	3.92±0.04
<b>Test and P values</b>		sd=2; 197 F= 0.826 p>0.05	sd=2; 197 F= 0.869 p>0.05	sd=2; 197 F= 0.869 p>0.05	sd=2; 197 F= 18.59 <b>p&lt;0.05</b>		sd=2; 197 F= 6.595 <b>p&lt;0.05</b>

\* One way anova test

activities but the social and public one than those whose answers were "no"; and it is also determined that functional status score averages of the women who had their baby reluctantly were higher all but self care at the 3<sup>rd</sup> month, and it was determined that these results were the cause of the meaningful difference in house work and self care activities (p<0.05; t=-2.41,

p<0.05; t=2.36). At the 6<sup>th</sup> month, it is found that IFSAC score average of the women whose answers were "yes" to the question of whether she wished to have baby was higher (=3.70) and it is determined that this result was the cause of the meaningful difference in self care activities. (p<0.05; t=2.89), (Table IV). It is seen that IFSAC point average is lower of the

**Table III:** Scattering of the average points of the postpartum functional status Inventory according to the type of delivery and number of the children (n=200).

	<b>n</b>	<b>Domestic</b> $\bar{X} \pm SS$	<b>Social and Communal</b> $\bar{X} \pm SS$	<b>Infant care</b> $\bar{X} \pm SS$	<b>Self-care</b> $\bar{X} \pm SS$	<b>Professional</b> $\bar{X} \pm SS$	<b>Total DSFDE</b> $\bar{X} \pm SS$
<b>Type of delivery*</b>							
<b>6<sup>th</sup> week</b>							
Vajinal	95	2.80±0.53	2.00±0.80	3.42±0.20	3.42±0.20	-	3.17±0.31
Cesarean	105	2.69±0.57	1.96±0.20	3.40±0.20	3.40±0.20	-	3.09±0.32
<b>Test and p values</b>		sd=198 t= 1.40 p>0.05	sd=198 t= 0.41 p>0.05	sd=198 t= 3.35 <b>p&lt;0.05</b>	sd=198 t= 0.80 p>0.05		sd=198 t= 1.74 p>0.05
<b>3<sup>rd</sup> month</b>							
Vajinal	95	3.63±0.20	3.77±0.42	3.99±0.04	3.68±0.10	-	3.74±0.11
Cesarean	105	3.64±0.19	3.70±0.46	3.98±0.06	3.70±0.09	-	3.74±0.11
<b>Test and p values</b>		sd=198 t= -0.03 p>0.05	sd=198 t= 1.01 p>0.05	sd=198 t= 1.95 <b>p&lt;0.05</b>	sd=198 t= -1.37 p>0.05		sd=198 t= 0.09 p>0.05
<b>6<sup>th</sup> month</b>							
Vajinal	95	3.92±0.08	4.00±0.00	4.00±0.00	3.78±0.08	-	3.91±0.04
Cesarean	105	3.90±0.09	3.99±0.09	3.99±0.02	3.81±0.07	-	3.90±0.05
<b>Test and p values</b>		sd=198 t= 2.04 p>0.05	sd=198 t= -0.95 p>0.05	sd=198 t= 0.95 p>0.05	sd=198 t= -2.41 <b>p&lt;0.05</b>		sd=198 t= 0.60 p>0.05
<b>Number of children**</b>							
<b>6<sup>th</sup> week</b>							
1 child	86	2.48±0.58	1.94±0.73	3.71±0.25	3.36±0.25	-	2.98±0.34
2 children	83	2.95±0.45	2.10±0.76	3.95±0.11	3.46±0.14	-	3.26±0.24
3 children and over	31	2.90±0.43	1.80±0.69	3.99±0.41	3.40±0.11	-	3.21±0.19
<b>Test and p values</b>		sd=2; 197 F= 19.23 <b>p&lt;0.05</b>	sd=2; 197 F= 1.902 p>0.05	sd=2; 197 F= 1.517 <b>p&lt;0.05</b>	sd=2; 197 F= 0.183 <b>p&lt;0.05</b>		sd=2; 197 F= 1.785 <b>p&lt;0.05</b>
<b>3<sup>rd</sup> month</b>							
1 child	86	3.59±0.22	3.72±0.45	3.96±0.07	3.70±0.09	-	3.72±0.13
2 children	83	3.68±0.17	3.79±0.41	4.00±0.00	3.70±0.09	-	3.76±0.08
3 children and over	31	3.64±0.21	3.61±0.49	4.00±0.00	3.64±0.11	-	3.72±0.11
<b>Test and p values</b>		sd=2; 197 F= 3.589 <b>p&lt;0.05</b>	sd=2; 197 F= 2.012 p>0.05	sd=2; 197 F= 15.92 <b>p&lt;0.05</b>	sd=2; 197 F= 5.437 <b>p&lt;0.05</b>		sd=2; 197 F= 4.359 <b>p&lt;0.05</b>
<b>6<sup>th</sup> month</b>							
1 child	86	3.88±0.08	3.99±0.11	3.99±0.02	3.81±0.08	-	3.89±0.05
2 children	83	3.94±0.07	4.00±0.00	4.00±0.00	3.79±0.08	-	3.91±0.04
3 children and over	31	3.94±0.07	4.00±0.00	4.00±0.00	3.75±0.06	-	3.90±0.03
<b>Test and p values</b>		sd=2; 197 F= 14.15 <b>p&lt;0.05</b>	sd=2; 197 F= 0.661 p>0.05	sd=2; 197 F= 0.661 p>0.05	sd=2; 197 F= 5.746 <b>p&lt;0.05</b>		sd=2; 197 F= 4.276 <b>p&lt;0.05</b>

\*Significance test of the difference between to averages. \*\*\* One way anova test.

women who have support for baby care and work at the 6th week, the 3rd and 6th month after birth (Table IV).

Generally, as the postpartum period lasts, it is determined that the IFSAC score average increases and causes a meaningful difference statistically with all activities after birth. (p<0.01; F=630.34, p<0.01; F=959.25, p<0.01; F=76.33, p<0.01; F=441.27, p<0.01,

F=877.83), (Table V), (Figure 1).

**Table IV:** Scattering of the average points of the postpartum functional status inventory according to their Willingness to have baby, receiving help in infant care and house work (N=200).

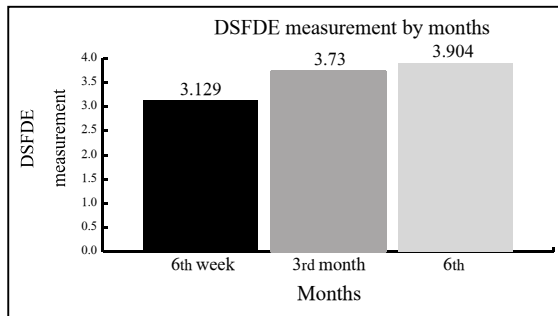
	n	Domestic (in family) $\bar{X}\pm SS$	Social and Communal $\bar{X}\pm SS$	Baby care $\bar{X}\pm SS$	Self care $\bar{X}\pm SS$	Professional $\bar{X}\pm SS$	Total DSFDE $\bar{X}\pm SS$
<b>Willingness baby*</b>							
<b>6<sup>th</sup> week</b>							
Yes	173	2.71±0.57	2.01±0.76	3.83±0.23	3.41±0.20	-	3.11±0.32
No	27	2.91±0.46	1.81±0.61	3.97±0.08	3.42±0.12	-	3.22±0.23
<b>Test and p values</b>		sd=198 t= -1.77 p>0.05	sd=198 t= 1.26 p>0.05	sd=198 t= -3.18 <b>p&lt;0.05</b>	sd=198 t= -0.33 p>0.05		sd=198 t= -1.59 p>0.05
<b>3<sup>rd</sup> week</b>							
Yes	173	3.91±0.08	3.99±0.08	3.99±0.01	3.80±0.08	-	3.90±0.04
No	27	3.95±0.07	4.00±0.00	4.00±0.00	3.76±0.06	-	3.91±0.03
<b>Test and p values</b>		sd=198 t= -2.41 <b>p&lt;0.05</b>	sd=198 t= -0.39 p>0.05	sd=198 t= -0.39 p>0.05	sd=198 t= 2.36 <b>p&lt;0.05</b>		sd=198 t= -0.63 p>0.05
<b>6<sup>th</sup> month</b>							
Yes	173	3.64±0.19	3.75±0.43	3.98±0.05	3.70±0.09	-	3.74±0.11
No	27	3.63±0.22	3.63±0.49	4.00±0.00	3.64±0.11	-	3.72±0.11
<b>Test and p values</b>		sd=198 t= 0.17 p>0.05	sd=198 t= 1.33 p>0.05	sd=198 t= -1.81 p>0.05	sd=198 t= 2.89 <b>p&lt;0.05</b>		sd=198 t= 1.09 p>0.05
<b>Help in baby care and house word**</b>							
<b>6<sup>th</sup> week</b>							
Receiver	100	2.48±0.58	1.86±0.68	3.71±0.23	3.38±0.23	-	2.97±0.33
Non-receiver	100	2.99±0.39	2.10±0.78	3.99±0.04	3.43±0.15	-	3.28±0.21
<b>Test and p values</b>		sd=198 t=-7.41 <b>p&lt;0.05</b>	sd=198 t= -2.26 p>0.05	sd=198 t= -11.9 <b>p&lt;0.05</b>	sd=198 t= -1.85 p>0.05		sd=198 t= -7.85 <b>p&lt;0.05</b>
<b>3<sup>rd</sup> month</b>							
Receiver	100	3.62±0.21	3.71±0.46	3.97±0.06	3.69±0.10	-	3.72±0.12
Non-receiver	100	3.65±0.19	3.76±0.43	4.00±0.00	3.70±0.09	-	3.75±0.10
<b>Test and p values</b>		sd=198 t= -1.06 p>0.05	sd=198 t= -0.79 p>0.05	sd=198 t= -4.81 <b>p&lt;0.05</b>	sd=198 t= -0.79 p>0.05		sd=198 t= -1.66 p>0.05
<b>6<sup>th</sup> month</b>							
Receiver	100	3.89±0.09	3.99±0.10	3.99±0.02	3.79±0.08	-	3.89±0.05
Non-receiver	100	3.93±0.07	4.00±0.00	4.00±0.00	3.79±0.07	-	3.91±0.04
<b>Test and p values</b>		sd=198 t= -2.48 <b>p&lt;0.05</b>	sd=198 t= -1.00 p>0.05	sd=198 t= -1.00 p>0.05	sd=198 t= 0.33 p>0.05		sd=198 t= -1.80 p>0.05

**Table V:** Scattering of the average points of the postpartum functional status inventory according to total DSFDE points (n=600).

Total DSFDE*	n	Domestic (in family) $\bar{X}\pm SS$	Social and Communal $\bar{X}\pm SS$	Baby care $\bar{X}\pm SS$	Self care $\bar{X}\pm SS$	Professional $\bar{X}\pm SS$	Total DSFDE $\bar{X}\pm SS$
(1) 6 <sup>th</sup> week	200	2.74±0.56	1.98±0.74	3.85±0.22	3.41±0.19	-	3.13±0.31
(2) 3 <sup>rd</sup> month	200	3.63±0.20	3.73±0.44	3.98±0.05	3.69±0.10	-	3.74±0.11
(3) 6 <sup>th</sup> month	200	3.43±0.61	3.99±0.07	3.99±0.01	3.79±0.08	-	3.90±0.04
<b>Test and p values</b>		sd=2; 597 F= 630.34 <b>p&lt;0.01</b>	sd=2; 597 F= 959.25 <b>p&lt;0.01</b>	sd=2; 597 F= 76.33 <b>p&lt;0.01</b>	sd=2; 597 F= 441.27 <b>p&lt;0.01</b>		sd=2; 597 F= 877.83 <b>p&lt;0.01</b>
<b>Post Hoc Test Scheffe test</b>		(1-2)* (1-3)* (2-3)*	(1-2)* (1-3)* (2-3)*	(1-2)* (1-3)* (2-3)*	(1-2)* (1-3)* (2-3)*		(1-2)* (1-3)* (2-3)*

\*One Way anova test (Bonferromi adaptation)

**Figure 1:** 6th week, 3rd month and 6th month total inventory of functional status after childbirth months ratings.



## DISCUSSION

It was seen that women's functional status increases as their ages go higher in this research. (Table II) In McVeigh's study (1997), it was determined that age had very little influence on motherhood satisfaction; as the mother's age went higher, after-birth-fatigue increased but satisfactions with adoption of the baby, visiting the clinics after birth and motherhood role playing also increased<sup>(23)</sup>. In the study of Apay and Pasinlioglu (2009), it was determined that points went down as the age increased<sup>(11)</sup>. As the reason to seem a contrary in our research to those researches, that the women's getting more experienced with baby care and house work and their feeling of responsibility as their age gets older might affect them for assuming the after birth functions sooner.

In our study, women who are primary school graduates performed a higher functional status than the other groups at baby care responsibilities at the 6<sup>th</sup> week and so did the women who have university degree or more at self care activities at the 3<sup>rd</sup> and 6<sup>th</sup> month after birth (Table II). Tulman et al, in his study (1990), determined that IFSAC point averages of those who have higher education level are lower than those who have lower education<sup>(20)</sup>. With the baby care at the 6<sup>th</sup> week; higher expectations and more information of women who have higher education or their sharing of the baby care responsibilities by getting help from others might have decreased the point average. At self care activity at the 3<sup>rd</sup> and 6<sup>th</sup> months; that the women resume to work at these periods they care themselves much more or they save more time for themselves by getting support for the baby care and house work due to their economic abilities could be thought as the reasons of why the women who have higher education that have

better functional status. As the education level goes up, people's self care tendency also increases<sup>(24)</sup>.

In the study, it is seen that women who gave vaginal birth turned back to baby care functions sooner than the women who gave birth by the cesarean section operation (Table III). It is a natural result for the women who gave vaginal birth to assume baby care sooner than the women who gave birth by the cesarean section operation. Beji and his friends, in his study (2003), determined a meaningful relation between birth means and resumption of the activities before pregnancy on baby care responsibilities<sup>(18)</sup>. It was determined that women who had vaginal birth took baby care responsibility sooner in the study. In a study made by Tulman and Fawcet (1988), it was determined that more than 6 weeks were needed to resume all functions after birth and this period would be much more for those who gave cesarean birth comparing to the vaginal birth giving women<sup>(25)</sup>.

It was determined that child number was affective over the functional status of the 6<sup>th</sup> week and the 3<sup>rd</sup> month after birth. As the number of the children increases, it is observed that house work activities, baby care and IFSAC also increases but functional status over self care decreases. This difference is also observed at the 6<sup>th</sup> month (Table III). Tulman et al has determined that social and public activities and self care activities increases as pregnancy and birth numbers increases (1990)<sup>(20)</sup>. McVeigh has determined that the primiparas visits the prenatal clinics more frequently and have more anxiety and depression than the multiparas (1997) (23).

One of the remarkable results in the research is that the IFSAC is higher on the baby care at the 6<sup>th</sup> week and house work at the 3<sup>rd</sup> month and on the self care at the 3<sup>rd</sup> and 6<sup>th</sup> months of women who had baby reluctantly (Table IV). With the advanced analysis, it is found that women who have baby reluctantly were over 30 years of age and primary school graduates, and lack of social security, had lower income than their expense, gave vaginal birth and had three or more children and had no help for baby care and house works. Besides, it may be thought that these women turn back to postpartum functional status sooner since they take responsibility and being experienced although they were reluctant and unplanned to have baby. Reason for higher performance of self care of the women having baby voluntarily at the 3<sup>rd</sup> and the 6<sup>th</sup> months



after birth may be that they save more time for themselves since they get support. It is determined that women who planned their pregnancy are at better level on social and public activities and general IFSAC in Ozkan and Sevil study (2007)<sup>(10)</sup>.

Another remarkable result to deal with is returning back to functional status of the women who do not take any help with baby care and house work (Table IV). It was found that women who take help for baby care were lower at functional status regarding baby care and house work activities in Apay and Pasinlioglu studies (2009)<sup>(11)</sup>. On contrary to our study findings, Ozkan and Sevil (2004) determined that functional status regarding to baby care of those who took help for baby care were higher and McVeigh (2000) determined that house activities, social and public activities and self care activities were meaningfully higher of the women who take social support at 3<sup>rd</sup> and 6<sup>th</sup> month after birth<sup>(22,26)</sup>. In our research, it is thought that lowness of the functional status of the women who take help for baby care and house work results from the supporters' assumptions of the works that should be done by the women themselves. Generally, as the postpartum period lasts, increase of the women's functional status is compatible with the technical literature (Table V and Figure 1). In the studies made, it was determined that as long as the postpartum period lasts, higher the women's functional status gets<sup>(20,22,27-30)</sup>. McVeigh determined that mothers would not return back to functional status before birth six months after birth (1998)<sup>(29)</sup>. It was seen that mothers were able to fulfill primarily the baby care and then the house work responsibilities thoroughly in the first six months after birth. Beji and his friends determined that though the physical recovery is made within six weeks after birth, much more time was needed to adaptation for the ability of being a parent or baby care (2003)<sup>(18)</sup>. Apay and Pasinlioglu determined that as long as the postpartum period lasts, women's points at social and public sub-dimension of IFSAC increases (2009)<sup>(11)</sup>. In MacDonald's study (2011), it was determined that functional status of women at self care and social and public activities develops slowly and physically active women performs three times better functional status six weeks after birth than those who are regular or poor in physical activities. Hence, in the same study, it is seen that women who are highly tired in mentally and physically in the 12<sup>th</sup>

week after birth performed low functional status<sup>(31)</sup>. Our research outcomes resembles the results of all other studies made in this subject.

## RESULTS

It was determined that age, having a second child, giving a vaginal birth, having an immediate family, education, wish to have baby, having support for baby care and house work affect the women's return to status before birth from postpartum at the end of the study. Other studies also seem to support these findings. In the studies, it is also stated that desire for pregnancy, mean of the birth, marriage duration, place of living, week after the birth, whether having help for baby care and house work affect the women's return to status before birth from postpartum<sup>(9,10,25,27,28)</sup>.

### Suggestions

In direction of the findings of the study;

- Considering the postpartum functional status of women, postpartum follow ups should be provided with longer than the six week physical recovery period,
- Upon the fact that women who give vaginal birth have better functional status, health care personnel should give information to the women about the birth affects over the functional status starting from the period before the birth,
- Taking the postpartum recovery period in to consideration, paid leave should be reconsidered at least 6 month long,
- Study should be done within different provinces and larger sampling,
- It is suggested that postpartum functional status causes should be examined and revealed by using the quantity and quality research types together of the same subject since they reveal the feelings, thoughts and senses obviously.

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