

THE COMPARISON OF PARAMETERS OF MOTHER AND NEWBORN AFTER BIRTH

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Mother's age, birth, abortion, pregnancy and living baby number are important for mother and baby health. First and fifth minutes Apgar scores are also considerable as risk factors. The purpose of this study is to evaluate the risk factors for mother and neonates in 1583 vaginal normal delivery.

MATERIAL AND METHOD

We reviewed the gravidity, parity, abortion, maternal age, number of children, use of contraception, place of previous delivery length and weight of newborn, Apgar scores at the first and fifth minutes in 1583 women who delivered vaginally at Atatürk University Medical Faculty Department of Obstetric and Gynecology. The results were shown in tables and statistical analyses were carried out in the parameters.

DISCUSSION

Many parameters are important for mother and baby for their health. For instance, according to the results of a study in USA the mortality rates below 39 year age change minimally. But it increases in very young adolescents (5). Maternal mortality increases after 30 years of age significantly (7). The more parity, antepartum and postpartum hemorrhage, malpresentation, anemia cause many chronic conditions a asuterine prolapse, cervical erosion, diabetes etc. So maternal risks multiply (3,18).

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The women with 4 and more deliveries have more trauma with cesarian, forceps, suction extraction (3). Induction abnormalities were encountered in young pregnant because of the insufficiency of pelvic development and malnutrition (6). In developed countries maternal mortality rates have declined, but the relation between maternal age and mother death was not changed (2). Congenital abnormalities, especially Down Syndrome increases in older ages. In a Newyork study, these risks multiply in older age as three times in every five year age group after 30 years of age (8). Spontaneous abortions are common in very young and older mothers. This may be as a result of congenital abnormalities. The chromosomal abnormalities asX monosomy are also much more in adolescent peregnants (17). Cerebral palsy is related to the age of mother (13). Neonatal deaths increase after more parity (156).

Most of our patients were from urban areas, especially from Erzurum. But some of the properties were similiar to rural areas. For. instances, antenatal care was not common and regular in most cases. Only 150 of 1583 mother had contraception formerly. In a religious group avoiding obstetric care, perinatal mortality was higher threee times and maternal mortality was higher 100 times than obstetrical care group (1).

In our study, no maternal mortality were seen in 1583 deliveries. But 40 dead births were encountered. In 10% of 1583 deliveries, the mothers were 35 and above year old age. 5 % of mothers were older than 35 in USA in 1975 (14) Parity number were 5 or more in 28 % of our cases. In many of the developed countries, 5 and more parity numbers were 10 % in 1970 s. This rate was 20-45 % in underdeveloped countries (14).2 % of our cases had carried out 4-6 spontaneous or induced abortion. 72% of mothers had no abortion. In Özel's study of 3583 patients, no abortion rate was 77 % , 2.77. % had 3 of more abortions. These results of rural area are similiar to ours (10).

78 % of mothers had 1-3 alive children, 16 % had 4-6 in our series. 15 % of mother had 5 or more children in a study of İstanbul, Çobançeşme(13).

72 % of women had no early or late neonatal death. Only 3 % of mothers had 4-6 dead infants formerly. This is similiar to Özel's rates(10). The average newborn weight was 3195 gr and lenght 49.8 cm. In high altitude, birth weigh decreased in a study carried out in Colorado. We could not find such a relation. Our Apgar scores are lower than the developed countries. This is because of the lack of antenatal care. Most of our patients were administered at the beginnnig or in a stage of birth induction. Our dead birth ratlwas 2 %. Infants with congenital abnormality were 0.2 % of cases. These results were also similiar to the other study of this region (10).

The first pregnancy were in 15-19 years old age in our 197 cases. The rate of low birth weight was 28 % more in 18-19 year age group than 20-24 age (19).

We could not find such a correlation. The relation between mother's age-newborn's length and mother's age abortion were similar to other studies(19). Maternal age and first, fifth minutes Apgar scores correlation was higher in 35-39 age group while maternal ages increase, Apgar scores decrease. This is also similar to other studies(1). We could not find any correlation between gravidity and 1.0-5 . minutes Apgar scores.

Newborn weights increased in more gravidity numbers. In higher gravidity group, the length of infants were lower. In 4-6 gravidity group, the average newborn length was 33-36 cm. There was a positive correlation between gravidity and dead birth. The similar relation was valid for gravidity and abortion.

Although the socioeconomic levels of our cases were found better than the rural areas, some characteristics of this group were not satisfactory. For example, only 150 of 1583 women had admitted for contraception formerly and none of them had antenatal care.

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FINDINGS: GROUP 1

Table 1: The distrubition of gravida numbers in the 1583 normal delivery cases.

Gravida uumber	Cases'number	%
1-3	1040	65,69
4-6	319	20,15
7-9	224	14,16
Total	1583	100.00

Table 2: The distrubition of parity numbers in the 1583 normal delivery cases.

Parite	Case Number	%
1-3	1135	71,70
4-6	299	18,89
7-+	149	9,41
Total	1583	100.00

Table 3: The distrubition of normal delivery cases according to abortus numbers.

Abortus Number	Case Number	%
0	1150	72,65
1-3	391	24,70
4-6	42	2,65
Total	1583	100.00

Table 4: The distrubition of normal delivery cases according to maternal age,

Age	Case number	%
15-19	108	6,83
20-24	553	34,93
25-29	511	32,28
30-34	234	15,03
35-39	134	8,46
40-+	39	2,46
Total	1583	100.00

Table 5: The distrubition of normal delivery cases according to early neonate and late neonatal baby deaths.

Baby deaths	Cases numbrer	%
0	1152	72.77
1-3	379	23.94
4-6, +	52	3.29
Total	1583	100.00

Table 6: The distrubition of normal delivery cases according to living children.

Living children	Cases numbers	%
1-3	1244	78.58
4-6	265	16.74
7-+	74	4.88
Total	1583	100.00

Table 7: Distrubition of normal delivery cases according to the place where a birth is delivery.

Place	Cases numbers	%
Village	292	18.45
City	827	52.24
Primigravida	464	29.31
Total	1583	100.00

Table 8: Who helped in their prior deliveries?

Who helped in their prior delivery	Cases Nuubers	%
Doctor	615	38.85
Midwife	504	31.84
Primigravida	464	29.31
Total	1583	100.00

Table 9: Use of contraceptive.

Method of contraceptive	Cases 'numbers	%
I U D	69	4.34
Oral Contraceptive	71	4.49
Others	10	0.63
Don't use contraceptive	1433	90.52
Total	1583	100.00

Table 10: The distribution of baby's length in the normal 1583 delivery cases.

Length (cm)	Case's number	%
30-46	69	4.36
45-50	1152	72.86
51-+	362	22.86
Total	1583	100.00

Table 11: The distribution of baby's weight in the normal delivery cases.

Weight	Cases' Number	%
0-2500-	149	9.41
2500-3000	293	10.85
3000-3500	678	40.29
3500-4000	395	20.49
4000- +	68	4.36
Total	1583	100.00

Table 12: The distribution in the first minute apgar score.

Apgar Score(1')	Case number	%
0	25	1.57
1-3	56	3.54
4-6	877	61.71
7-10	525	33.17
Total	1583	100.00

Table 13: The distrubition in the first five minute apgar score.

Apgar score(5')	Case number	%
0	43	2.71
1-3	5	0.31
4-6	56	3.54
7-10	1479	93.36
Total	1583	100.00

Table 14: The first pregnancy age of primigravida.

Age	Cases number	%
15-19	197	12,45
20-24	160	10,10
25-29	48	3,03
30-34	12	0,75
Multigravida	1166	73,66
Total	1583	100.00

Tablo 15: The kinship degree of couples.

The kinship degree of couple	Cases nubmber	%
1°. Kinship	147	9,29
2°. kinship	70	4,42
No kinship	1366	86,29
Total	1583	100.00

Table 16: The baby proportion with anomali

Type of the anomali	case number	%
Foot anomali	1	0,06
Cleft palate	1	0,06
Cleft lip	2	0,12
No anomali	1579	99,75
Total	1583	100.00

GROUP 2: REALATIONS

Table 1: The relation between maternal age and baby's weight inthe last delivery.

Weight	Maternal age						
	15-19	20-24	25-29	30-34	35-39	40-44	45- +
0-2500	22	40	33	10	8	1	—
2500-300	24	134	110	35	16	8	1
3000-3500	36	226	249	99	55	12	1
3500-4000	22	154	105	64	45	12	3
4000- +	4	9	14	30	10	—	1

Tablo 2: The relation between maternal and baby's lenght in the last delivery.

Maternal age	Baby's lenght			
	30-46	47-50	51- +	Total
15-19	14	76	18	108
20-24	25	415	113	533
25-29	17	389	105	511
30-34	8	153	77	238
35-39	3	91	40	134
40-44	2	27	4	33
45- +	—	4	2	6
Total	69	1155	359	1583

$P < 0.0005$

Table 3: The relation between maternal age and abortus.

Maternal age	The number aof abortus				Totals
	0	1-2	3-4	5- +	
15-19	97	11	0	0	108
20-24	456	91	1	2	550
25-29	362	128	12	9	511
30-34	141	75	13	9	238
35-39	94	62	15	5	176
Totals	1150	367	41	25	1583

$p < 0.005$

Table 4: The relation between parity and maternal age.

Parite	Maternal age						Totals
	15-19	20-24	25-29	30-34	35-39	40-...+	
1-3	104	527	2382	100	18	4	1135
4-6 +	3	27	129	138	116	35	448
Totals	107	554	511	238	138	39	1583

P<0.005

Table 5: The relation between maternal age and in the first apgar score.

Maternal age	Apgar Score				Totals
	0	1-3	4-6	7-10	
15-19	1	3	68	36	108
20-24	6	20	366	161	553
25-29	7	14	300	190	511
30-34	9	10	132	70	221
35-39	27	9	103	51	190
Totals	50	56	969	508	1583

P<0.005

Table 6: The relation between maternal age and in the first five apgar score.

Maternal age	Apgar Score				Totals
	0	1-3	4-6	7-10	
15-19	5	1	4	98	108
20-24	10	3	28	512	553
25-29	13	1	9	488	511
30-34	15	0	15	381	411
Totals	43	5	56	1479	1583

P<0.005

Table 7: The relation between gravida and in the first five apgar score.

Gravida	Apgar score				Totals
	0	1-3	4-6	7-10	
1-3	25	4	40	981	1050
4-6, +	18	1	16	498	533
Totals	43	5	56	1479	1583

P<0.750

Table 8: The relation between gravida and baby's weight.

Gravida	Baby's weight					Totals
	0-2499	2500-2999	3000-3499	3500-3999	4000-+	
1-3	78	244	437	244	37	1040
4-6	21	54	151	77	17	320
7-9	16	30	90	73	14	223
Totals	115	328	678	394	68	1583

P<0.005

Table 9: The Relation Between Gravida and Dead Baby

Gravida	BDeath Bauby		Living Baby	Totals
	1-3	4-6		
1-3	100	1	939	1040
4-6	279	51	213	543
Totals	379	52	1152	1583

P<0.005

Table 10: The relation between gravida and abortus

Gravida	Abortus			Totals
	No abortus	1-3	4-6	
1-3	905	135	0	1040
4-6	245	256	42	543
Totals	1150	391	42	1583

P<0.005

Table 11: The Relation Between Kinship Degree And Death Baby.

The Ksinsip, Degree	Death Baby		Totals
	1-3	3-4	
10. Kinship	43	7	50
20. Kinship	15	6	21
Totals	58	13	71

P<250