

BIRTH CHARACTERISTICS OF SYRIAN REFUGEES IN TURKEY

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Abstract: *The Syrian crisis has caused a large number of refugees to flee to Turkey. This study aimed to investigate the birth characteristics of Syrian refugees in Istanbul, Turkey. A retrospective study was conducted of singleton live births that occurred at a hospital in Istanbul between June 1 and December 31, 2015. All Syrian refugees were eligible for inclusion. The main outcomes were cesarean delivery, gestational diabetes, and pre-eclampsia.*

The results showed that cesarean delivery was more common among Syrian refugees than Turkish citizens (32.3% vs. 43.1%). Median neonatal birth weight was also lower among Syrian refugees (3110 g vs. 3300 g). Gestational diabetes and pre-eclampsia were less common among Syrian refugees than Turkish citizens (1.7% vs. 7.7% and 1.5% vs. 3.9%, respectively).

These findings suggest that Syrian refugees in Turkey have different birth characteristics than Turkish citizens. Further research is needed to understand the reasons for these differences and to develop interventions to improve the health of Syrian refugee women and their babies.

Keywords: *Syrian refugees, Birth characteristics, Cesarean delivery, Gestational diabetes, Pre-eclampsia, Istanbul*

Introduction

Syrian crisis has began at March, 2011 and till today 5,163,650 people(till August, 2017) become refugees at Eqtypt, Iraq, Lubnan, Urdun and Turkey.¹ According to latest data, the number of Syrian refugees living in Turkey is 3,106,932.2 46.8% of these are women (6.6% at 0-4years old, 8% 5-11 years old, 6.8% 12-17 years old, 23.6% 18-59 years old and 1.7% 60+years old).² Till August 2017, 224,50 Syrian babies were born in Turkey.³ Istanbul is one of four cities that have more than 300,000 Syrian refugees.⁴ In this study we tried to get a perspective to the Syrian refugees birth characteristics in our center, which is located in the most crowded city of Turkey with lots of Syrian refugees.

Material and Method

From the date 2013 which is the most

early approach of refugees to our center till June, 2017 the medical datas of Syrian refugees births analysed retrospectively. Mother and baby medical datas are analysed. SPSS 22.0 programme was used for the statistical analysis. Cases are grouped into two according to the characteristics of age (19 years old and less- more than 19 years old)and delivery type(normal spontaneous birth and cesarean delivery). Descriptive statistics of the data are done. The distribution of the variables evaluated by Kolmogorov-Smirnov test. Quantitative independent datas are analysed by Mann-Whitney U test. For the qualitative datas Ki-Squared test is used and when the conditions were not met Fischer's exact test is used. $p < 0.05$ is accepted as statistically meaningful.

Results

Age distribution of 779 cases were between 13-43 years and median age was 23. Average gravida was 2.4 ± 1.6 and parity was 1.2 ± 1.4 . The number of the women with parity more than and equal to 5 (grand multipar) was 23 (3%). Normal spontaneous birth (NSD) ratio was 66% and the ratio of cesarrearan (SCA) was 34%. 51% of cesarrearan cases had cesarrearan operation before. 13% of these had more than 2 cesarrearan operations before (maximum 4). Primary cesarrearan ratio was 17%. Mostly seen blood types were A Rh (+) (38%) and O Rh (+) (30%) respectively and at least was AB Rh (-) (1%). Rh type blood incompatibility were seen at 48 cases (6.2%).

Mean hemoglobin (Hb) and hematocrit (Hct) values of the cases before vaginal delivery/cesarrearan operation were 11.2 ± 1.7 (g/dL) and 34.4 ± 4.0 (%) respectively. 254 of the cases (32.6%) had Hb values less than 11 g/dL. Pregnancy weeks at birth were between 27 and 42 weeks and mean pregnancy week was 38.6 ± 1.9 . 77 of the cases (105) were under 37 weeks and 11 of them (1.4%) made delivery at 42nd gestational week. Mean birth weight was 3239 ± 464 grams. 46 of the babies were under the weight of 2500 grams (6%), 25 of them had weight over than 4000 grams and more (3.2%). Mean baby length and head circumferences were 49.9 ± 2.9 cm and 34.5 ± 1.8 cm. 51% of the babies were female and 49% of them were male. 6 babies were still birth (0.8%). For two of them the reason of the death were anencephaly and decolman plasenta. There was just one baby with anomaly (anencephaly, 28 weeks). Total 7 cases (1%) had complications after the birth which were rest placenta, rectus hematoma, cervical laceration, uterine atony and 4th degree perineal laceration. Among these complications; 2 of them were after cesarrearan and 5 of them were after vaginal delivery. At 6 cases (0.8%) per operatif complications such as uterine rupture, uterine atony and latum hematoma occurred. Total 42 patients (5.4%) had erythrocyte suspension and fresh frozen plasma transfusions for the anemia and hemorrhage (Table 1). The age of the cesarrearan group was significantly higher than the vaginal delivery group. Again at the cesarrearan group gravity and parity numbers were more. There was not any difference at comparion of each group for pregnancy weeks at the birth, baby parameters, hemoglobine and hematocrit values. The number of ES and TDP transfusions significantly higher at cesarrearan group (Table 2).

165 of women were 19 years old an less (21%) and 614 of them were more than 19 years old (79%). >19 years old aged group had more gravidity and parity and the ratio of repeated cesarrearan was higher at >19 years old. At 19<19 years old aged group the number of women giving birth that have pregnancy weeks less than 37 was 20(12%), for 42 weeks was 2 (1%). There is not any birth under 28 weeks. >19 years old a ged group the number of women giving birth that have pregnancy weeks less than 37 was 57(9%), for 42 weeks was 9 (1.5%). The number of the births<28 weeks of pregnancy was 1. 5.5 % of the births at 19-<19 years old aged group were under 2500 grams of weight. At this group the ratio of the babies with >4500 grams was 0.6%. >19 years old aged group 4.6% of the babies that are born were under the weight of 2500 grams. At this group, the ratio of the babies with the weight of >4500 grams was 0.3%. There was not any significant difference at the comparison the groups in terms of pregnancy weeks at the birth, number of stillbirth, babyparameter, anomalies, peroperative and after birth complications, ES transfusion, and the values of the hemoglobine and hematocrite (Table 3).

Discussion: Meanwhile 35%% of the births by Syrian refugees living in Turkey were delivered in our center. 2/3 of the births of mentioned population were normal vaginal delivery and 1/3 of them were

cesarrean. Cesarrean ratio in Syria was 12% at 1993 and 15% at 2002.5 After Syrian refugee crisis; Lubnan which is one of the countries with most crowded refugee populations, at the study of Huster et al. Which involve 2012-2013 years the cesarrean ratio increase to 35.3%. At recent two studies the cesarrean ratios are mentioned as 32.3% at Demirci et al.⁷ and 36.9% at Alnuaimi et al.⁸ Cesarrean ratios of the studies are similar to each other and to our study as well; and the ratio of cesarrean is increasing throughout they ears. Cesearrean births of the refugees are mostly repeated cesarrean with the ratio of 57-64%.⁶⁻⁸ At the mentioned population primary cesarrean ratio is 12-15%.⁶⁻⁸ In our study the numbers of the both primary and the repeated cesarrean are similar to the given ratios at the literature (17% and 51%, respectively).

Syrians that gave birth are mostly young and in reproductive period. Mead age of them are given as 23.74+/-6.08 at Demirci et al.⁷ and 26.4+/-6.28 at Alnuaim et al.⁸ Our cases' mean age is also similar (24.2+/-5.9). World Health Organisation define 10-19 aged group as "adolescent".⁹

References

Demirci et al

Alnuaimi et a