ANTENATAL CLASSES FOR PREGNANT SYRIAN WOMEN ON MATERNAL HEALTH OUTCOMES

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Abstract

Alliance of International Doctors (AID), Esenler Maternity and Child Health Hospital (EMCHH) implemented an educational project on pregnancy and maternal health targeting pregnant Syrian women in Esenler District of Istanbul. The Project aims were increasing health literacy, service utilization and social integration among the pregnant Syrian women. The Project carried out with twelve groups for twelve months. Each group had twelve or fifteen women trained for six hours within a month and reached to a hundred seventy women between October 2017 and October 2018. The Motherhood school was practiced in EMCHH. 124 women of participants filled in-person satisfaction surveys. Data was obtained from 77 women about their delivery experiences through phone surveys. 80 postnatal home visits were conducted by medical voluntary teams who observed general health of mothers and babies along with the mothers' knowledge and practices. According to the results, 23.4 % of the participants were under eighteen years old and 8.9 % were above thirty-five years old. 18.8 % had four or more pregnancies. Of the 124 survey participants, 118 visited EMCHH for antenatal care, 123 reported high satisfaction and benefits with the trainings and 122 reported satisfaction with its scope. High awareness and practice of breastfeeding, vaccination were observed during postnatal visits.

Keywords: Women health, Syrian refugees, Maternal health, Pregnancy, Motherhood, Antenatal classes

Introduction

Pregnancy and Motherhood School was implemented as an educational project on pregnancy and maternal health targeting pregnant Syrian women in Esenler District of Istanbul.

General information on the Syrian Refugees in Turkey

According to 27th of December 2017 data, Turkey host 3.426.786 registered Syrian refugees, while 555.179 Syrian refugee live in Istanbul making 3.63% of the total population of Istanbul. Hosting 22.678 Syrians corresponding to 4.93% of its population, Esenler is one of the provinces that are densely populated by the Syrian refugees in Istanbul. (Erdoğan,2017)

The number of Syrian refugees between zero to four age group is more than 400,000 as of the 1st of December 2016. About 230-250,000 of this number is estimated to have been born in Turkey. The number of Syrian women in the reproductive age is 674,207. (Erdoğan,2017) (Mülteciler Derneği, 2017)

According to data of Esenler Maternity and Children's Health Hospital, 741 of the total 5485 deliveries in 2016 and 1386 of 2889 deliveries belonged between January and June

2017 were by the Syrian women. These numbers make Syrian births account for 13.5% in 2016, 47.9% of total deliveries until June 2017 as Syrian birth rates in the hospital.

Increased infant mortality rates in the regions refugees live

Infant mortality rate is one of important health indicators showing quality of public health services and development of the country. Turkey has improved from 86 deaths per 1000 live births to 10.7 between 1981 and 2015.

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Before the war Syria had improved health indicators, infant mortality rate had dropped from 132 to 17.9 per 1.000 births, under five mortality rate from 164 to 21.4 per one thousand live births, maternal mortality from 482 to 52.1 per 100.000 live births between 1970 and 2009. (European Union). An increase in infant mortality rates has been observed in the provinces highly populated by Syrian refugees compared with Turkey's mean rate and Syria's pre-war rate since 2011. These rates are 25, 20, and 18 per 1.000 live births in Kilis, Şanlıurfa and Gaziantep respectively in 2015. (TUIK, 2016) (TEPAV, 2016) (TEPAV, 2016) (DeJong, et al., 2017)

Causes of increased infant mortality rate

Infant mortality rates are less in the babies of the mothers provided with ante-postnatal care and education for motherhood during their pregnancies compared with the mothers that were not provided with such care and education. (Özkan, Bakar, Maral, & Bumin, 2009)

Infant mortality rates are closely related to the mother's health literacy and behavior on reproductive health. Adolescent pregnancies, multiple pregnancies, frequency of births are factors increasing infant mortality. An increase in number of pregnancy and labor increases the mortality among infants and children under five years old. (Şamkar & Güner, 2018)

Lack of or weak health literacy is very important factor deteriorating the health status of the Syrian refugees. Health illiteracy is more likely to be common among women as a result of language barrier, gender-based discrimination in the society and some security concerns. These factors limit their health seeking behavior such as access to information and health promotion, preventive medicine, follow ups and health care services. This situation results in an increase in the number of pregnancies, birth rates without family planning, antenatal and postnatal care, safe child delivery leading to high maternal mortality, infant and under five years old age mortality rates. (European Union, 2018)

While men have a chance to learn language and improve social integration at work and children do the same at schools, women do not have similar chance for language and access to information due to they have to take care of children and home all the time making them socially isolated from society and integration to public life such as public health services in need. They became more vulnerable in terms of low income, poverty, less education, health illiteracy resulting in sexual, physical, and psychological violence, sexually transmitted diseases, child marriages, adolescent pregnancies with serious health consequences.

The population of Syrian women at the reproductive age is more than 845,000, the number of children born in Turkey is more than 300,000 according to the Ministry of Health. According to the UNFPA, 15 % of the deliveries by the Syrian women are normal with higher risk requiring advanced obstetric care and long-term hospitalization compared with non-refugee control patients. Surveys taken place in İstanbul and Şanlıurfa show Syrian women having poor antenatal and postnatal care, higher rate of micronutrient deficiencies such vitamin B twelve, STDs and mental disorders. (European Union, 2018)

Besides increased infant mortality rates, morbidity of Syrian refugee infants is higher in a comparative study on Syrian Refugee Women's Health in Lebanon, Turkey, and Jordan. Samari's study found pregnancy complications to be prominent in Turkey, while Sexual and Gender-Based Violence, access to family planning, infant morbidity, menstrual irregularity, and preterm birth were common problems in all three countries. (European Union, 2018, s.95)

Table 1: Syrian refugee women's health issues by country context

All countries	**Turkey**	**Lebanon**	**Jordan**
Reduced use of modern contraceptives	Complications during pregnancy	Pelvic pain	Menstrual hygiene
Menstrual irregularity and dysmenorrhea		Child delivery complications	Low birth weight babies
SGBV			
Preterm birth			
Unplanned pregnancies			

(Samari, 2017, p. 95)

Methods

AID is an association that aims to contribute to global health equity by provision of medical assistance to people with limited or no access to healthcare due to natural and man-made disasters or poverty through activities in disaster management, psychosocial support, prevention and rehabilitation of disabilities and capacity building with a sense of duty. Our aim with providing mothers with antenatal, postnatal care and treatment, preventing antenatal and postnatal complications to be expected in unplanned and high-risked pregnancies, describing, preventing, and managing decrease maternal-infant mortality rates.

Scientific Research Commission accepted 'Antenatal Classes for Pregnant Syrian Women Project' request in meeting numbered 2017/5 on August 24, 2017. The project was implemented by volunteer medical teams at the Pregnancy School of the Hospital.

The beneficiaries were reached through the EMCHH's Obstetrics and Gynecology outpatient clinics, NGO's, migrant health centers and family healthcare centers in the region, local authorities, and social media.

The project was carried out for twelve months with twelve groups. Each group had twelve to fifteen pregnant women, some accompanied by their mothers or mothers-in-law. The project details were explained, and consent forms were taken from all participants at the beginning of the first session. The training was delivered in three two-hour long sessions, held

weekly for three consecutive weeks. The topics covered in each session can be seen at Table 2.

Table 2: Topics covered at the antenatal care trainings

First Session	Second Session	Third Session
*Female-male reproductive organs *Menstrual cycle and Pregnancy *Physiological and Physiological Changes in Mother During the Pregnancy *Daily life in Pregnancy *Changes in Pregnancy *The Most Common Problems in Pregnancy *Suggestions in Pregnancy *Pregnancy Control	*Antenatal care *Trimesters and their Characteristics *Symptoms of Danger in *Pregnancy and Exercise *Normal Delivery	*Welcome Baby *Breast Milk and Breastfeeding *Infant Care *Health Control and Vaccination in Babies *Family Planning

One hundred and seventy women applied to attend the trainings and filled a basic information form. At the end of the training, satisfaction surveys were conducted with the women who attended at least two sessions. The satisfaction survey included four main questions about their satisfaction and benefits of the antenatal care training (Annex 1).

One hundred and twenty-four women filled in-person satisfaction surveys. At the end of the project, data was obtained from seventy-seven women about their delivery experiences through phone surveys. Eighty postnatal home visits were conducted by medical voluntary teams who observed general health of mothers and babies along with the mothers' knowledge and practices. Teams filled out a questionnaire about health literacy and service utilization by interviewing parents of the baby during postnatal visits. (Annex 2) They were requested to show the baby vaccination charts given by the health centers and all 80 parents declared their visits and baby vaccination charts.

Results

Of the one hundred and seventy pregnant women, 23,4 percent was under eighteen years old and 8,9 was above thirty-five (Figure 1). 18,8 percent had four or more pregnancies (Figure 2).

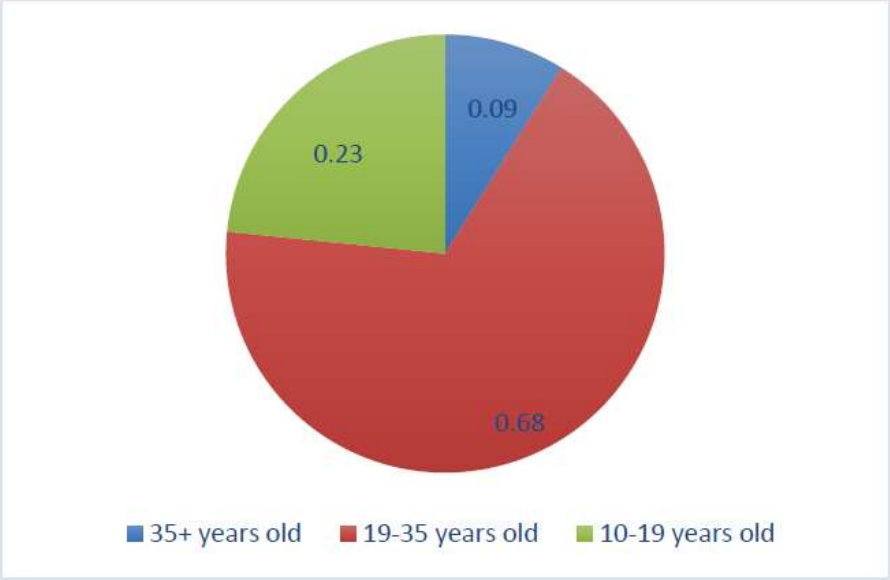

Figure 1: Age distribution of the participants, n=170

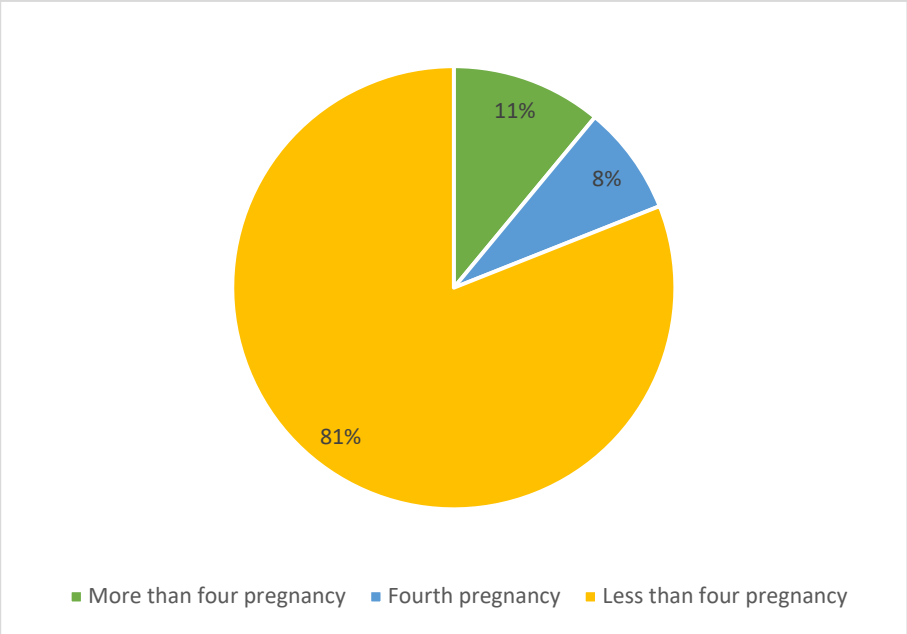

Figure 2: Parity in participants, n=170

Of the one hundred and twenty-four survey participants, one hundred and twenty-three (99,19 %) reported high satisfaction and benefits with the trainings and one hundred and twenty-two (98,38 %) reported satisfaction with its scope. All women received antenatal care services in health facilities; one hundred and eighteen of them did so at the EMCHH. One hundred and twenty-three participants (99,19 %) declared that they think the antenatal training will definitely be helpful during their delivery (Figure 3).

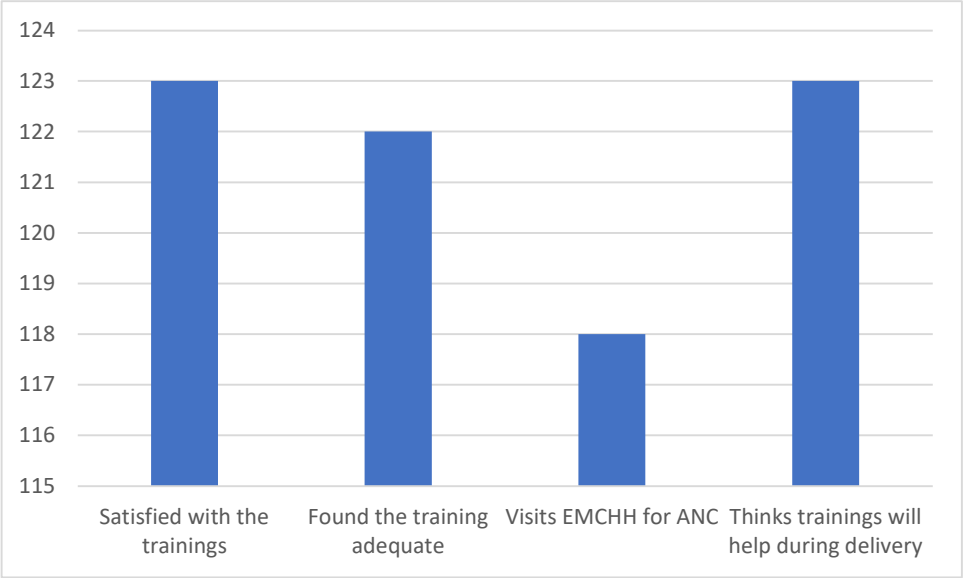

Figure 3: Satisfaction with the trainings, n=124

Eighty-eight women were reached for a phone survey at the end of the project, seventy-seven of them had delivered at the time of the phone survey. All of them (100%) delivered in a health facility. 83% of them had normal vaginal delivery and 17% had caesarean section (Figure 4).

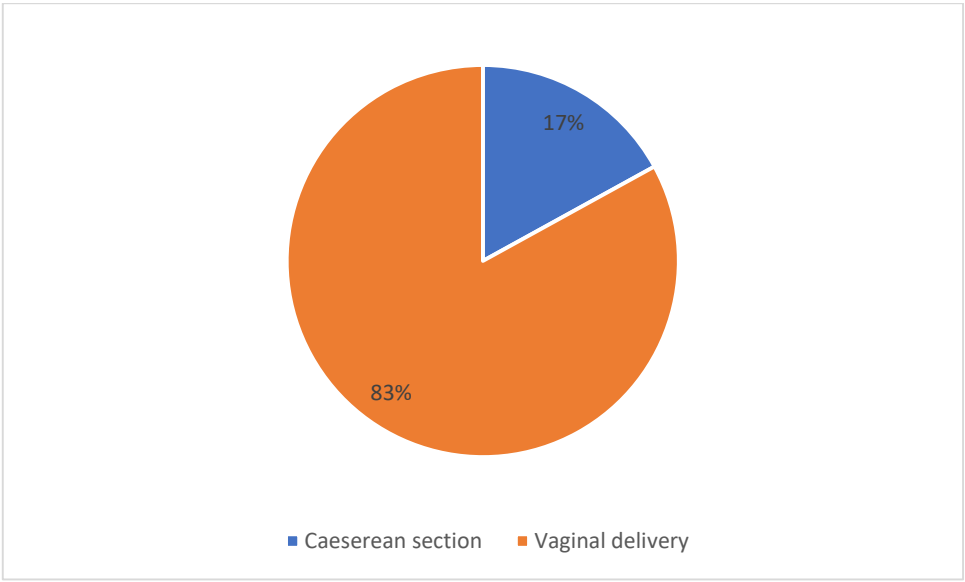

Figure 4: Mode of delivery, n=77

Volunteer medical teams conducted eighty home visits to congratulate mothers, deliver a newborn kit consisting of essential care products, observe the impact of the trainings, and provide guidance on newborn and postpartum care. High awareness and practice of breastfeeding and vaccination were observed during the visits. According to the results of questionnaires held in post-natal visits; 90 % of parents declared that they did not have any big concern about feeding and wellbeing of their babies. The percentage of parents visiting health facilities for vaccination and vitamin support was 100%. The vaccination rate was 100% (n=80), while vitamin support rate was about 75% (n=60). The rate of exclusive breastfeeding for the first sixth months was 56,25% (n=45), breastfeeding and feeding baby formula or cow milk 25% (n=20), while only formula was 18,75 % (n=15).

Discussion

High risk pregnancies due to age and multi-pregnancies were common. Pregnancies under the age of eighteen and above the age of thirty-five are considered risky. 32 % of the participants were at risk; among them adolescent pregnancies were the majority. Early marriage and willingness to bear children early in marriage may be the reason behind these figures and shows the importance of awareness rising among the population. Required legal actions were taken by the EMCHH for the current pregnancies. The trainings increased awareness on the risks among the participants and are expected to positively impact their future health decisions. Considering that the young women are not the sole decision makers in the target group, mothers and mothers-in-law were encouraged to participate in the trainings. Husbands were not involved as the women expressed their discomfort receiving training in a mix gender group.

One of the aims was to increase the social inclusiveness of the Syrian women through increasing contact with the host community. Attending the classes was an opportunity for many participants to leave home, socialize with other women, and communicate with the medical professionals from the host community. Volunteer medical teams visited the participants at home with a "welcome baby" gift package to provide emotional and social support.

Participation and satisfaction rates were high (99,19%), indicating Syrian women's interest in educational programs. Following the training, the attitude and practice regarding antenatal and postnatal period and delivery were positive (99,19%). Awareness on the benefits of the normal delivery was high (83%); those delivered by C-section (17%) were medically indicated.

The vaccination rate among participants was 100%. This rate is remarkably high compared with the rates shown by different studies. A study by Tayfur, Gunaydın and Suner showed that the vaccination rate was about 50-60% among refugees living outside of the camps between 2011-2016 (55 % for polio, 59% for measles). (Tayfur, Günaydin, & Suner,

2019). Another study showed that while the vaccination rates among Syrians living in the camps were respectively %75 and 66% for polio and measles, the rates dropped to 55 % for polio and 59% for measles among those living outside of the camps. (Özaras, et al., 2016). While an increase in the vaccination rates can be expected for the whole refugee population with the enhanced integration to the system over time, the trainings may have contributed to the full vaccination rate observed among the participants.

Although vaccinations rate was complete (100%), the exclusive breastfeeding rate was 56,25%, with 25% of mothers breastfeeding supported by baby formula or cow milk and 18,75 % mothers using only formula. Even though exclusive breastfeeding was not very common, the rate was higher compared with the reported average exclusive breastfeeding rate of 28,1 % among the Syrian refugees. (Değer, Ertem, & Çifçi, 2019)**.**

None of the mothers reported having complications during delivery as opposed to the reported high rate of complications among the Syrian refugees in Turkey by Samari (European Union, 2018, s. 95). The increased health literacy through the trainings may have contributed to this outcome by improving self-care and antenatal visits among the women.

The main limitation of our study was inability to extrapolate the findings to the general refugee population as the sample was not representative. As the antenatal training was voluntary, the decision of attendance by the participant women indicates a level of awareness and literacy.

The other limitation of this study was losing high number of participants during phone survey and home visits.

Conclusions

The Syrian women showed interest in this project. The awareness and practice of the participants on the maternal and newborn health were improved. As a way of social integration of Syrian women, these antenatal classes can be good opportunity. Thereby, the project can be implemented in different locations to increase health literacy and social integration of the Syrian refugee women and can be adapted in public health policies as a refugee integration policy to be generalized to whole country

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