

# A Sociodemographic Analysis of Mothers Who Abandoned Their Newborn Babies: A Single-Center Study

## Yenidoğan Bebeklerini Hastanede Bırakan Annelerin Sosyodemografik Özellikleri Üzerine Bir Değerlendirme: Tek Merkezli Bir Çalışma

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### ABSTRACT

**Objective:** It is aimed to investigate the sociodemographic characteristics of those mothers who have abandoned their babies legitimately in our hospital and to determine the reasons behind the abandonment.

**Material and Methods:** The medical records of those newborn babies who were abandoned in the period between January 2008 and December 2015 in our hospital and of their mothers were reviewed retrospectively for the sociodemographic characteristics and reasons behind the abandonment. The records were analyzed using IBM SPSS Statistics for Windows (IBM Corp., Armonk, NY, USA, version 20).

**Results:** Sixty-seven abandoned babies (girls 55.2%) were documented in the specified period and included in the study. The number of abandoned babies was observed to be increasing gradually over the years (n=1 in 2008 and n=17 in 2015). Most of the mothers (74.6%) had a low education level (secondary school or less). Of the mothers, 73.1% were unmarried and 62.7% were not working. Pregnancy was due to rape in 28.4% and due to incest in 4.5% of the cases. The primary reasons of abandonment were social reasons (62.7%), among which peer pressure (trying to keep other family members unaware of the pregnancy) was the most frequent (78%). It was observed that the rate of baby abandonment increased as the educational levels of the mothers decreased ( $p<0.05$ ).

**Conclusion:** In this study, the primary factor for abandonment was peer pressure. There is certainly an immense need to multiply this kind of study into baby abandonment. The study could be considered as a preliminary approach providing tips about the reasons for baby abandonment.

**Key Words:** Abandonment, Babies, Children, Mothers, Newborn, Sociodemographic



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## ÖZ

**Amaç:** Bu çalışmada hastanemizde yenidoğan bebeklerini terk eden annelerin sosyodemografik özelliklerinin araştırılması ve terk edilmiş sebeplerinin belirlenmesi amaçlandı.

**Gereç ve Yöntemler:** Ocak 2008 ve Aralık 2015 tarihleri arasındaki periyotta hastanemizde terk edilen yenidoğanların ve terk eden annelerinin tıbbi kayıtları, sosyodemografik özellikler ve terk edilmişlerinin belirtilen sebepleri açısından retrospektif olarak gözden geçirildi. Kayıtlar, IBM SPSS Statistics for Windows (IBM Corp., Armonk, NY, USA, version 20) kullanılarak analiz edildi.

**Bulgular:** Belirlenen zaman diliminde terk edilmiş 67 bebek (%55.2'i kız) saptandı ve çalışmaya dahil edildi. Terk edilen bebeklerin sayısının yıllar boyunca kademeli olarak arttığı gözlemlendi (2008'de n=1 ve 2015'te n=17). Annelerin çoğunluğunun (%74.6) eğitim seviyesi düşüktü (ortaokul ve altı). Annelerin %73.1'i evli değildi ve %62.7'si çalışmıyordu. Gebeliklerin %28.4'inin tecavüz ve %4.5'inin eneset ilişki sonucu olduğu görüldü. Terk edilmişlerinin birincil sebepleri sosyal sebepler (%62.7)'di ve bu sosyal sebepler arasında en sık (%78) görüleni çevre baskısıydı (gebeliği aile bireylerinden saklamak). Annelerin eğitim seviyeleri azaldıkça bebeklerin terk edilme oranının arttığı gözlemlendi ( $p<0.05$ ).

**Sonuç:** Bu çalışmada, birincil terk edilmiş nedeni çevre baskısıydı. Bebek terk edilmeleri hakkında benzer çalışmaların artması kesin bir gerekliliktir. Bu çalışma, bebeklerin terk edilme sebepleri hakkında ipuçları sağlayan bir başlangıç adımı olarak düşünülebilir.

**Anahtar Sözcükler:** Terk, Bebekler, Çocuklar, Anneler, Yenidoğan, Sosyodemografik

## INTRODUCTION

Baby abandonment has been a constant historical phenomenon observed in every society. Oedipus in Greek mythology and the Prophet Moses are possibly the two most known examples (1). Many references can be given from children's books and fairy tales. Nevertheless, most real-life stories do not have "happy endings", unlike those in books. Baby abandonment frequently appears in the news of both printed and social media. Despite being widely encountered throughout history, studies into baby abandonment are very rare in literature. In the limited number of studies from developed countries like USA and UK and from upper-middle revenue countries such as Malaysia, it has been reported that this phenomenon is not well perceived (1-5). In these studies, it has also been reported that baby abandonment is frequently related to social reasons, the rate of abandonment is increased by economic worries, and sexual disparities may add to this phenomenon (2,4-6). Historians have suggested in another study that parents who abandoned their infant children in nineteenth-century Europe were making a rational choice by leaving their children to foundling hospitals and similar institutions in the hope of providing them with better living standards which they themselves were unable to do (7). Problematic socio-economic conditions, drug and alcohol addiction, HIV infection, poverty and illegitimacy were found to be major contributors to infant abandonment (8-10). Additionally, the young age of mothers, being unmarried, lower educational levels, unwanted pregnancies and lack of social support also increase the risk of baby abandonment (11).

There are several ways to abandon a baby. In cases where it is preferred that the abandoned baby is not found, this may lead to infanticide (1). It is quite difficult to discover such criminal actions; therefore, related risks should be evaluated and pre-monitored closely starting from early pregnancy, and precautions should be planned accordingly. On the other hand, a safe way of abandonment is when the mother declares

her intention together with its reasons (such as social and economic reasons) for abandoning her baby while she is still in the hospital. Thereafter, the baby is taken under institutional care by social services personnel and the baby is later allowed to be adopted by a family in the early period with the consent of the parents.

Determining the background leading to the giving up of each baby would help the resolution of this phenomenon. Based on this approach, the present study aimed to investigate the socio-demographic characteristics of those mothers who abandoned their babies legitimately in our hospital and to determine the reasons underlying the abandonment.

## MATERIAL and METHODS

The medical records of those newborn babies who were abandoned in the period between January 2008 and December 2015 in the Etlik Zubeyde Hanim Women's Health Training and Research Hospital as well as the medical records of their mothers were reviewed. All babies born and abandoned in our hospital are routinely transferred to the Neonatal Unit. Health examinations of the babies are performed thoroughly; meanwhile, the relevant social service is contacted and informed about the abandonment and the health condition of the baby. Following the examination and any medical treatment when needed, the babies are transferred to a designated social service. Approval was obtained from the hospital academic board for the study. All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

In the present study, the babies' data including gender, birth weight, gestational age, type of delivery and the mothers' data including age, educational, marital, occupational and

employment statuses, number of previous pregnancies, presence or absence of follow-up of the pregnancy, and the reasons for abandonment obtained from the medical files were retrospectively analyzed. Any babies abandoned anonymously by unidentified parents were excluded from this study.

### Statistical Analysis

Data analyses were performed using the IBM SPSS Statistics for Windows (IBM Corp., Armonk, NY, USA, version 20). Kolmogorov-Smirnov and Shapiro-Wilk tests were used to test the normality of data. For numerical variables, normally distributed data were expressed as mean  $\pm$  standard deviation and non-normally distributed data were expressed as median, minimum and maximum. Data were expressed as numbers and percentages for categorical variables. In group comparisons, Mann-Whitney U test was used for non-normally distributed variables. Pearson's chi-square test was used for the comparison of categorical variables. A p-value of  $<0.05$  was accepted as statistically significant.

## RESULT

Sixty-seven abandoned babies were documented for the period between January 2008 and December 2015 in our hospital and included in the present study. The number of abandoned babies was observed to be increasing gradually from 2008 ( $n=1$ ) to 2015 and reached a peak in 2015 ( $n=17$ ) (Figure 1).

The sociodemographic characteristics of the babies and their mothers are presented in Table I. None of the abandoned babies had a major abnormality. Of the babies, 37 (55.2%) were girls and 30 (44.8%) were boys. Of the abandoned babies, 25 (37.3%) were preterm and 18 (26.4%) needed intensive care treatment. The mean gestational week was 36.4 weeks (range, 25-41 weeks) and 80.6% ( $n=54$ ) of the babies were born in the 35-41 gestational week interval. The mean birth weight was  $2.735\pm 777.03$  g (range, 660-3.950 g). Of the babies, 42 (62.7%) were born by vaginal delivery and 25 (37.3%) were born by cesarean section.

The mean age of the mothers was 23.9 years (ranging from 13 to 40 years) and most of them (61.4%) were between 18 and 25 years of age. Most of the mothers (74.6%) were observed to have an educational level of secondary school or lower. No significant difference was observed in terms of the mothers' education and the gender of the babies abandoned ( $p>0.05$ ). However, it was observed that the rate of baby abandonment increased as the educational levels of the mothers decreased ( $p=0.036$ ). Of the mothers, 73.3% were unmarried and 62.7% were not working. Most of the working mothers (88.8%) were employed in the service sector as unqualified personnel.

All mothers declared that these were undesired pregnancies. Most of the mothers (41.8%,  $n=28$ ) declared pregnancy

**Table I:** Sociodemographic characteristics of the abandoned babies and their mothers.

Characteristics	
<b>Babies' Gender, n (%)</b>	
Girl	37 (55.2)
Boy	30 (44.8)
<b>Gestational Age, week, mean (min-max)</b>	36.46 (25-41)
<b>Birth Weight, g, mean (min-max)</b>	2,734.96 (660-3.950)
<b>Type of Delivery</b>	
Cesarean section	25 (37.3)
Vaginal delivery	42 (62.7)
<b>Mother's Age, year, mean (min-max)</b>	23.91 (13-40)
<b>Mother's Age Groups, year, n (%)</b>	
<18	6 (9.0)
18-25	41 (61.2)
26-30	11 (16.4)
31-35	2 (3.0)
>36	7 (10.4)
<b>Mothers' Educational Level</b>	
Illiterate	3 (4.48)
Literate	1 (1.49)
Primary School	30 (44.78)
Secondary School	16 (23.88)
High School	11 (16.42)
University student	3 (4.48)
University graduate	3 (4.48)
<b>Mothers' Working Status, n (%)</b>	
Working	25 (37.3)
Not working	42 (62.7)

out of wedlock. Additionally, 28.4% ( $n=19$ ) of the mothers declared that the pregnancy was by rape and 4.5% ( $n=3$ ) due to incest. Only 13.4% of the mothers had regularly monitored pregnancies. It was their first pregnancy for 91% ( $n=61$ ) of the mothers in this study. When asked about the reasons for the abandonment, 62.7% ( $n=42$ ) of the mothers declared social reasons and 25.4% ( $n=17$ ) economic reasons mainly related to the fact that they received below subsistence level income. The remaining 11.9% ( $n=8$ ) declared both social and economic reasons (Figure 2). Among the social reasons, trying to keep the pregnancy secret from other family members was the most common ( $n=38$ , 78%). No statistically significant difference was observed between the educational levels of the mothers and the reasons for the abandonment ( $p>0.05$ ).

## DISCUSSION

Baby abandonment has been a serious ongoing phenomenon in all societies, which can even result in infanticide. Enlightening the factors related to baby abandonment in a society may provide insights to the approach and thereby the taking of precautions to minimize it. The present study was performed in Ankara, the capital city of Turkey, to investigate the sociodemographic characteristics of mothers who have legitimately abandoned



**Figure 1:** Number of abandoned babies according to the years.

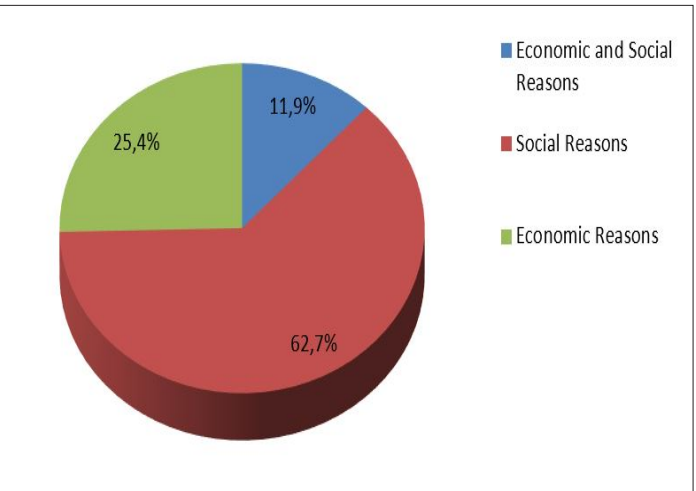
their babies in our hospital as well as their declared reasons for doing so.

Our country has upper-middle income with a population of around 80 million, the majority being Muslim. The population consists of 49.8% women (12); 71% of the working women are employed as unqualified common laborers in the service sector (13). In the present study, 74.6% of the mothers abandoning their babies had low educational levels (graduates of secondary school or lower), which is higher than the rate of mothers who were secondary school graduates or lower (69%) in the overall population. Similarly, Friedman et al. (11) reported that low levels of education resulted in an increased rate of baby abandonment.

According to 2013 data of the Turkish Statistical Institute, 51.4% of babies born in 2013 were boys and 48.6% were girls (13). In the present study, 44.8% of the abandoned babies were boys and 55.2% were girls. Accordingly, the rate of abandoned girls in our study was found to be higher than the rate of girls born which may suggest that abandoning a baby girl is more likely. No significant difference was observed for these effects by level of education and the gender of the abandoned babies.

Our study revealed that the number of abandoned babies gradually increased from 2008 ( $n=1$ ) to 2015 ( $n=17$ ). In another study conducted in Malaysia, which is also an upper-middle income country, Razali et al. (4) reported an increase in the number of illegally abandoned babies.

There may be several reasons why a mother might abandon her baby such as lack of father for one, lack of social support, illegitimacy, incest, rape, extramarital affairs, a change in an individual's status in life (1). Women may be under peer pressure due to several reasons such as religious matters, social norms, income disparities, poor educational levels and gender inequality. Unmarried mothers are another major risk group for baby abandonment (1, 11). Pre-marital sex and pregnancy are not welcomed in many societies due to religious doctrines and



**Figure 2:** Distribution of the mothers according to the reasons of abandonment.

social norms (4). This is also valid in our country. This situation exerts more pressure on women, particularly in low-income groups. Society generally reacts to the woman who is pregnant because of an illegitimate relation, particularly in lower socio-economic parts of the community. When an illicit relationship results in pregnancy, it is the woman who has to deal with most of the troubles. In the present study, 73.3% of the mothers abandoning their babies were unmarried, 28.4% were pregnant due to rape and 4.5% were pregnant due to incest. Moreover, evaluation of the reasons of abandonment revealed that social reasons were the most common (62.7%), among which peer pressure (trying to keep the pregnancy secret from other family members) was the most frequent (78%). This result clearly demonstrates the effect of peer pressure on women.

In the present study, the level of education did not change the reasons for the abandonment, but the rate of abandonment decreased in relation to any increase in educational level. However, no difference was observed in the reasons for the abandonment with respect to the educational levels.

In conclusion; the number of studies into baby abandonment worldwide seems unfortunately to be totally inadequate. The present study could be considered a preliminary approach giving specific clues to find the root-causes of infant abandonment. There is certainly an immense need to multiply this kind of study on the subject. We believe that it is vital to encourage women's education, to create opportunities for women in business, and to concentrate on eliminating any gender disparities in order to help resolve or at least minimize the problem of baby abandonment. We hope that this present study and any future ones conducted on this subject would contribute to determine the reasons for baby abandonment and to the planning of projects aimed at reducing it.

The main limitations of this study are that it was retrospective and performed in one center.

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