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Born into Direct Provision: Outcomes of Infants Born to Asylum Seekers

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Abstract

Aim

Asylum seekers in Ireland have free access to antenatal care. Our aim was to review the outcomes of liveborn infants to mothers living in direct provision centres and the antenatal care their mothers accessed.

Methods

This was a retrospective review of infants born to asylum seekers, between November 2017 and February 2020, in a tertiary neonatal unit. The results were compared to the 2018 general hospital outcomes.

Results

During this period, 81 neonates were born to 78 asylum seekers. The median booking gestation was 30+4 weeks and only 9 (12%) had an early dating scan and 30 (42%) had a complete anatomy scan. Fifteen (20%) mothers had positive serology. Ten (12%) neonates were born prematurely, 20 (25%) were admitted to NICU and there were two (2%) neonatal deaths. At discharge, only 19 (23%) were exclusively breast fed. Fifty-six (71%) infants were followed in clinic and 10 (18%) had at least one “non-attendance”. Sixteen (20%) patients used an interpreter and language barriers lead to several miscommunications.

Conclusion

Infants born to asylum seekers had significantly higher rates of NICU admission (25% v 13%), maternal blood borne infections (20% v 1.5%) and lower rates of exclusive breastfeeding (23% v 45%) compared with the general hospital population.

Introduction

There has been a sharp increase in the number of migrants seeking asylum in Europe since 2014[1]. Asylum seekers arriving in Ireland are housed in "direct provision", pending assessment of their asylum application. Direct provision (DP) is the system by which the State receives asylum seekers in Ireland and directly provides for their essential needs; including accommodation, food, education to children and a small weekly allowance. Asylum seekers are provided with a medical card during this time and have access to free antenatal care. In 2019, there were 6,497 people living in DP in Ireland[2].

There are several reviews of the perinatal outcomes of asylum seekers, with contradictory results. While one found a significantly increased risk of preterm birth (OR 1.24), low birth weight (1.43), perinatal mortality (1.5) and congenital anomalies (1.61) among infants born to migrant mothers[3], others describe a "healthy migrant effect" with better pregnancy outcomes compared with local women[4]. A study in 2001 assessed pregnancy outcomes of persons with refugee status in Ireland and found an increased risk of perinatal mortality in the refugee cohort and that 79% booked late in pregnancy[5]. However, this study included a different population (those who had already been granted international protection), at a time when infants acquired automatic Irish citizenship and pre-dated the national introduction of the Direct Provision system.

The neonatal and pregnancy outcomes of asylum seekers have not been described in this country or in the era of DP. Our aim was to review the neonatal outcomes of liveborn infants in a tertiary neonatal unit, to mothers living in DP centres and the antenatal care they accessed.

Methods

This was a retrospective review from November 2017 to February 2020. Infants were identified by a discharge address to one of three known DP centres (one reception and two accommodation centres) in our area. Ethical approval was obtained. The outcomes were compared to hospital data from 2018[6]. Data was collected from the electronic patient record and analysed using Stata, Version 16.0. Mean and standard deviation were used for normally distributed data, while median and interquartile ranges were used for non-normal distribution. Statistical analysis of categorical data was performed using the Chi-squared test.

Results

Eighty-one neonates (born to 78 women) were identified during this period.

Maternal Demographics

The mean maternal age was 31 years (25-36 years) and 36% were nulliparous. Most of the mothers were from the African continent (77%) with Nigeria and Zimbabwe the most common country of origin. There were small numbers of mothers from Europe, Western Asia and Asia.

Antenatal care

The median GA at booking was 30+4 weeks (19+0 - 35+5). Nine (12%) had a dating scan performed in our hospital before 15 weeks gestation and only 42% had a documented complete anatomy scan, due to the late gestation at booking. Hospital guidelines require the performance of a fetal anomaly scan routinely to all women between 20- and 22-weeks' gestation.

All mothers had serology results available before delivery and 20% were positive. This is thirteen-fold higher than the general hospital population, in which 1.5% of antenatal patients had positive serology in 2018 ($p< 0.01$). With respect to antenatal complications, 5% had gestational hypertension / pre-eclampsia requiring treatment and 11% had gestational diabetes (GDM) requiring insulin.

Labour and delivery

Nineteen (26%) of women living in DP travelled to the hospital by ambulance at the time of delivery. The three DP centres included were 9km, 11km and 38km respectively from the hospital. Two were accessible by a direct bus route and one had no direct means of public transport to the hospital. This may result in difficulties for asylum seekers accessing the hospital at night or at weekends. The presence of a companion of choice throughout labour is recommended by the 2018 WHO recommendations[7] but only 18% were documented to have a support person present.

The onset of labour was spontaneous in 55% and induced in 29%. This compares with a general hospital induction rate of 31% during the same epoch ($p=0.62$). The rates of normal vaginal delivery and caesarean section were not significantly different to the 2018 hospital outcomes.

Neonatal outcomes

Eighty-one liveborn neonates were delivered with a median GA of 39+1 weeks (38+3 - 40+1 weeks) and birth weight of 3.21kg (2.76 – 3.56kg). Ten (12%) were born prematurely, although this was not significantly different to the hospital incidence of 8% in 2018 ($p=0.15$). Significantly more infants delivered to asylum seekers required admission to the neonatal unit (25%) than the general hospital population ($p<0.01$). There were two early neonatal deaths (2%), both due to major congenital anomalies (Edwards syndrome and Potters syndrome). Seven infants had a congenital anomaly, 3 of which were major and some of the features had been detected antenatally in all three cases.

Hospital policy dictates that hemoglobinopathy screens are performed on infants at risk of sickle cell disease or thalassemia. However, only 87% of this group had a hemoglobinopathy screen performed, despite all infants meeting the criteria for testing. All infants identified as having sickle cell trait or alpha thalassaemia trait were referred to the National Hemoglobinopathy Clinic.

Post-discharge care

At the time of discharge from hospital there were significantly lower rates of exclusive breast feeding and significantly higher rates of combined feeding than the general population (p<0.01).

In Ireland, neonates only return to the paediatric outpatient department (POPD) in a maternity hospital if there is a specific medical concern. In this group, the number of infants followed up in POPD was similar to the hospital rate in 2018 (69% v 60%) (p=0.09). The most common reasons for attendance were for monitoring of jaundice, attendance at the infectious disease clinic or follow-up due to prematurity or underlying anomaly. Twenty-two (28%) of infants were followed for jaundice in POPD and each was seen between one and four times for this issue. Two infants (2%) were seen for a six-week check-up because they did not have an identified GP. Of infants requiring follow-up, 18% had at least one "non-attendance".

Communication

English was not the first language of many of the asylum seekers. There was documented use of an interpreter during the antenatal or postnatal course in 20% of cases. However, even where a need for an interpreter had been identified, they were not consistently used at each appointment and there was evidence of inconsistent recording of previous maternal or obstetric history and the delivery of bad news which may represent miscommunication in some consultations.

Table 1: Maternal and intrapartum outcomes

	Direct Provision N=78*(%)	2018 Hospital N=8359 (%)	p
Nulliparous	28 (36)	3612 (43)	0.22
GDM on insulin	8 (11)	289 (3.5)	**<0.01**
Positive Serology	15 (20)	128 (1.5)	**<0.01**
HIV	11 (15)	30 (0.36)	**<0.01**
Hepatitis B	5 (7)	48 (0.57)	**<0.01**
Hepatitis C	0 (0)	41 (0.49)	0.55
Syphilis	2 (3)	16 (0.19)	**<0.01**
IOL	22 (29)	2610 (31)	0.62
SVD	40 (51)	4202 (50)	0.37
OVD	5 (6)	1337 (16)	**0.02**
LSCS	33 (42)	2820 (34)	0.11

*not all data was available for each outcome

Table 2: Neonatal outcomes

	Direct Provision N=81* (%)	2018 Hospital N =8514* (%)	p
Preterm (<37 weeks)	10 (12)	676 (8)	0.15
NICU Admission	20 (25)	1116 (13)	**<0.01**
Exclusive breast feeding	19 (23)	3792 (45)	**<0.01**
Exclusive formula feeding	25 (31)	3024 (36)	0.38
Combined feeding	35 (43)	1575 (18)	**<0.01**
POPD Follow up	56 (69)	5103 (60)	0.09
Non-attendance in POPD	10 (18)	1316 (15)	0.49

*not all data was available for each outcome

Discussion

Similar to the 2001 study, a majority of the women originated in Africa (77% v 67%)[5]. However, the origin of the remainder differed and this is reflected in the profiles of asylum seekers coming to Ireland in 2018 where Syria, Georgia, Albania, Zimbabwe and Nigeria are the five most common countries of origin[8].

The mean GA at booking was late in both studies (27+ 4 weeks and 33 weeks)[5]. It may be that gestation at booking reflects recent arrival in the country rather than intrinsic system delay, however this is outside the scope of this study. It is possible that further delays in accessing antenatal care occurs in this population because these patients may not be aware of how to utilise a new healthcare system or may be reluctant to engage with what they may perceive to be bureaucracy. Where late booking is unavoidable, care should be optimised after booking.

Seventy-two (97%) asylum seekers attended the hospital for a booking visit prior to delivery. This represents an opportunity to identify background medical issues and assess the mother's communication skills - including identifying any need for an interpreter. Ensuring adequate communication is particularly important when taking consent for a procedure, giving medication or discharge advice and breaking bad news. Both telephone and on-site interpreters are readily available to the hospital. These issues, (language barriers and gaining informed consent), were also described in a 2014 qualitative study of midwives' experience of providing maternity care to asylum seekers in Ireland [9].

The detection of antenatal complications may be adversely affected by late gestation at booking, and in particular the short interval between booking and delivery in some instances. The relatively high rate of GDM requiring insulin (11%), three times higher than the hospital incidence of 3.5% ($p<0.01$), may be due to the ethnicity of the mothers, as a recent systematic review shows a 13% prevalence of GDM in Africa [10].

Of importance was the universal availability of maternal serology testing for infectious diseases prior to delivery in this group, given the high incidence of HIV, hepatitis B, and syphilis. The antenatal detection of these diseases minimised the risk of vertical transmission through the optimisation of antenatal treatment, appropriate management of neonates in the postnatal period and follow up in the neonatal Infectious Disease clinic.

We did note a significant increase in the admission to NICU in this group, and 13% had an Apgar score less than seven at five minutes. As paediatricians caring for infants of asylum seekers, it is important we are aware of the possibility of an as yet undiagnosed congenital fetal malformation in this sub-group given the low rate of anatomy scans performed (42%). Improved antenatal screening leads to an expectation that many serious neonatal conditions will have been identified before delivery.

There may be cultural reasons to explain the high incidence of combined feeding in the asylum seeker group. There is some evidence to suggest that African women choose to top-up with artificial formula, particularly in the early days before breast milk supply is established, to ensure their infant is receiving adequate nutrition [11].

While robust systems are in place to ensure that all infants receive neonatal screening, it is important that the subgroup of infants requiring a hemoglobinopathy screen are identified. However, this did not occur in 13% of infants. There was a high rate of follow-up appointments for infants in this group, particularly for neonatal jaundice. Families living in DP may have difficulties attending follow-up clinics and financial barriers, access to transport and childcare for other children all contribute to this. While the non-attendance rates were high, they did not differ significantly from our hospital rate during this time ($p=0.49$). On analysis of reasons for non-attendance, many missed appointments were due to patients being moved to a different part of the country.

Most asylum seekers accessed support from social workers during their pregnancy. The supports provided included the provision of emotional support, arranging foster care of other children during the perinatal period, transport to the DP centre at discharge, with provision of a car seat for the journey, and often providing clothing and basic infant supplies.

The DP system is often subjected to criticism as an unsuitable system for caring for asylum seekers. In this study, all pregnant women were seen by a GP in the DP centre and immediately referred for antenatal care once a pregnancy was identified. Our data highlights the clinical importance of keeping a woman and her infant, where possible, in the same geographical area for the duration of both pregnancy and postnatal care. Issues may arise with the continuity of care when patients are transferred between maternity hospitals during a pregnancy (outside of clinical need).

The limitations of this study include its retrospective nature. It was only possible to identify patients living in major DP centres, and it is likely that some infants discharged to DP in small hotels and guesthouses were not identified. The data was incomplete in a small number of patients, owing to the transition from paper records to electronic charts at the start of this study period. Other limitations include the need to utilise historical control data from 2018 for comparison. In view of the paediatric focus of this study, we did not include miscarriages or stillbirths in this review, although there is some evidence to suggest that asylum seekers have a higher incidence of stillbirth [12].

In summary, infants born to asylum seekers had higher rates of NICU admission, maternal blood borne infections and lower rates of exclusive breastfeeding compared with the general hospital population. These infants and their mothers have unique medical and social needs and it is essential that we adapt our maternity services to accommodate these. A 2018 WHO report outlines key areas to improve pregnancy and neonatal outcomes in this group, including the provision of interpretation services to ensure good communication, information on entitlements for healthcare users and providers, awareness of a patient's background and ultimately the provision of person-centred, culturally sensitive and preventive care[13]. From a practical perspective, hospitals should assess maternal understanding of the English language at the booking visit and at each patient-interaction, with the use of interpreters where required. In addition, it is essential that maternal serology is sent promptly and acted upon both antenatally and postnatally to mitigate the risk of vertical transmission of infectious diseases. Paediatricians should pay particular attention to the risk of undiagnosed congenital anomalies and ensure that all relevant screening is performed. Progress in this regard can be achieved through heightened awareness amongst healthcare professionals of the social and logistical barriers encountered by this population in accessing care.

Declaration of Conflicts of Interest:
The authors have no conflicts of interest to declare.

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