



NATIONAL OBSTETRIC INFORMATION SYSTEM (NOIS)

MALTA

First Quarterly Report: January to March 2008

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National Obstetric Information System (NOIS), Malta*

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NATIONAL OBSTETRIC INFORMATION SYSTEMS (NOIS)

A national obstetric information system was launched at the Department of Health Information and Research (DHIR) at the beginning of 1999 and now covers practically all deliveries taking place on the islands of Malta and Gozo.

Data collection and Sources of Information

Systematic data collection for NOIS commences once the mother delivers her baby. Information regarding the course and outcome of each pregnancy is recorded by the relevant staff at each centre on a standard NOIS sheet. Infant progress is followed until discharge from hospital or up to a maximum of 28 days after birth. Once the data are recorded, the sheets are forwarded to the DHI on a regular basis. At the DHI the relevant sheets are processed and entered into the NOIS database. Data is kept in accordance with the Data Protection Act, 2001.

The maternity centres actively participating in this information system are: Mater Dei Hospital, Gozo General Hospital, St James Hospital Sliema and Zabbar and St. Philip's Hospital.

Report analysis

This report analyses the national maternities/deliveries and infant births that occurred in the first quarter of 2008 and where appropriate compares it to the figures reported for the same period of last year. The data in this report describes the birth statistics for all maternities (Maltese and non-Maltese) and infant births registered into the system.

Data is sent to the Registry from all hospitals on the Maltese Islands. Accuracy and completeness of data sent on the NOIS reporting sheets is the responsibility of the Hospital providing data. Unfortunately, towards the end of 2007 and early 2008 the major hospital on the islands encountered some problems with data collection and this accounts for the increased numbers of unspecified/unknown variables seen in this report as compared to the previous year.

ANALYSIS

There were a total of 961 maternities/deliveries registered in the Maltese Islands for the first quarter of 2008, which resulted in a total of 975 infant births.

Comparing these figures with those reported for the same period last year one can see that the number of infant births increased by 52 births (923 births reported in 1st quarter 2007).

MATERNITIES / DELIVERIES

MATERNAL AGE, MARITAL STATUS, NATIONALITY AND PARITY

Maternal Age:

The maternities have been grouped according to the standard age groupings and the frequency distribution of deliveries according to maternal age at delivery has been analysed. In the first quarter of 2008, the greatest number of deliveries 333 (35%), occurred in the 25-29 year age group, while there were 2 deliveries in the age group <15 years and one in the 45 and over age group. The minimum age of the mothers was 14 years while the maximum age was 46 years. The most frequent age at delivery was 29 years, and the average age at delivery was also 29.

The frequency distribution of deliveries according to maternal age group is given in the following table.

Deliveries according to maternal age groups:

<i>Age group (years)</i>	<i>1st Quarter 2008</i>		<i>1st Quarter 2007</i>	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
<15	2	<1	0	0
15-19	61	6	56	6
20-24	141	15	159	17
25-29	333	35	300	33
30-34	308	32	275	30
35-39	100	10	100	11
40-44	15	2	20	2
45+	1	<1	1	<1
Unspecified	0	0	2	<1

Marital Status:

For the first quarter of 2008, 23% (219) of all deliveries occurred to mothers who were reported as single (never married); while 74% (709) of all deliveries occurred to mothers reported as married, and 3.4% (33) of mothers were reported as widowed / separated or divorced. Marital status was specified for all deliveries.

In the first quarter of 2008, only 2 mothers were registered as not having 'Support at home to raise the infant'.

Nationality:

91% (878) of all deliveries this quarter occurred to women of Maltese nationality, while 8% (73) were of known non-Maltese nationality. In the remaining 1% (10) nationality was not specified.

Parity:

There were 53% (508) of mothers who were primiparas while 47% (453) were multiparas in the first quarter of 2008.

MATERNAL LIFESTYLES

There were 48 (5%) of mothers who were reported to smoke one or more cigarettes during pregnancy in the first quarter of this year. None were reported to drink excessive alcohol and 4 (<1%) were reported as being drug abusers.

The following table gives the smoking, alcohol and drug habits of mothers for the first quarters of 2008 and 2007.

Maternal Lifestyles	1st Quarter 2008	1st Quarter 2007
	No.	No.
Cigarette smoking during pregnancy:		
1 to 3/day	14	5
>than 3/day	34	23
Do not smoke	750	872
Unspecified	163	13
Alcohol consumption during pregnancy:		
Up to 1unit/day	1	0
>than 1unit/day	0	0
None	797	900
Unspecified	163	13
Drug Abuse during pregnancy		
Yes	4	4
No	794	896
Unspecified	163	13

SPECIAL CONDITIONS OF PREGNANCY

In the first quarter of 2008, there were 12 cases of assisted reproduction (ART) reported, this includes all forms of ART namely ovulation stimulation, IVF and ICSI (4 cases of ART reported in 1st quarter 2007).

The table below gives the number of mothers reported with specific obstetric conditions during pregnancy. The most frequently recorded was gestational hypertension, there were in fact 6.5% of mothers who were registered as having gestational hypertension in the first quarter of 2008.

Conditions recorded during pregnancy	1st Quarter 2008			1st Quarter 2007		
	No	Yes	Unspecified	No	Yes	Unspecified
Antepartum Haemorrhage	809	24	128	902	11	0
Gestational hypertension	773	62	126	854	59	0
Pre-eclampsia	818	15	128	912	1	0
Placenta praevia	816	18	127	901	12	0
Abruption of placenta	831	2	128	909	4	0
Cardiovascular disease	829	3	129	912	1	0

Diabetes in Pregnancy

In the first quarter of this year, there was one mother who were reported as having Insulin Dependent Diabetes before the current pregnancy, none were reported as having NIDDM before pregnancy. In addition, there was a total of 7 mothers registered with gestational diabetes who were controlled without the use of insulin, and there were no mothers registered as having gestational diabetes treated with insulin.

CATEGORY OF MATERNITY ACCORDING TO DELIVERY

For the first quarter of 2008, there were a total of 948 (99%) singleton and 13 (1%) twin deliveries, there was 1 triplet delivery and no quadruplet deliveries.

<i>Category</i>	<i>1st Quarter 2008</i>	<i>1st Quarter 2007</i>
Singleton	948	904
Twin	12	8
Triplet	1	1
Quadruplet	0	0

INFANT BIRTHS

TOTAL INFANT BIRTHS AND GENDER DISTRIBUTION

In the first quarter of this year, there were a total of 975 infant births. All births of 22 weeks gestation or 500g birthweight are included in the register.

There were more male infants born than female, the gender distribution for this quarter was 501 (51%) males and 473 (49%) females. There was one birth for which the gender was undetermined (*1st quarter 2007: males –490; females – 433*).

INFANTS AND METHOD OF BIRTH

Of the 975 infants born, 604 (62%) were delivered as a vertex delivery, 319 (33%) by emergency or elective Caesarean Section and 52 (5%) by assisted vaginal delivery (includes forceps, ventouse and breech).

<i>Method of Birth*</i>	<i>1st Quarter 2008</i>	<i>1st Quarter 2007</i>
Infants delivered by vertex delivery	604	555
Infants delivered by emergency/elective Caesarean Section	319	333
Infants delivered by forceps	2	2
Infants delivered by ventouse	49	33
Breech deliveries	1	0

**Data analysed according to total infant births*

This quarter there were 319 babies born by caesarian section but 307 caesarian deliveries performed, this due to the fact that a number of caesarians are done in multiple birth deliveries. The Caesarean section operation rate was 31.9% of the total maternal deliveries (961) this quarter.

INFANT BIRTH WEIGHTS

In the first quarter of 2008, there were 893 (91.6%) of the total births that occurred in the birth weight range of 2500g to 4999g. 50 (5%) of the total births were in the low birth weight range of 1500g to 2499g, 12 (1%) of births were of very low birth weight 500g to 1499g. In 19 cases the birth weight was unspecified. One stillbirth was reported with birth weight of less than 500g. No babies were reported with a birth weight of 5000g or more.

<i>Birth weights</i>	<i>1st Quarter 2008</i>	<i>1st Quarter 2007</i>
<500g	1*	1
500-999g	5	5
1000-1499g	7	5
1500-1999g	7	4
2000-2499g	43	42
2500-2999g	214	202
3000-3499g	422	398
3500-3999g	214	227
4000-4499g	39	31
4500-4999g	4	6
5000+	0	0
Unspecified	19	2
Average Birth weight (g)	3194	3221

*This baby was an antepartum stillbirth.

OUTCOME OF BIRTH

The number of live births for the first quarter of this year was 970 which accounted for 99.5% of the total births at a national level. The remaining 5 births were stillbirths.

<i>Outcome of Birth</i>	<i>1st Quarter 2008</i>	<i>1st Quarter 2007</i>
Babies born alive	970	921
Stillbirths	5	2

Of the 970 live births this quarter, there were 5 early neonatal deaths and no late neonatal deaths registered.

<i>Neonatal Deaths</i>	<i>1st Quarter 2008</i>	<i>1st Quarter 2007</i>
Early Neonatal deaths	5	3
Late Neonatal deaths	0	0

INFANT FEEDING METHODS AT DISCHARGE

Infant feeding habits are recorded by hospital staff at the time of discharge, little can be said on the actual infant feeding habits as these may change soon after discharge from the birthing facilities.

<i>Infant feeding methods at time of discharge</i>	<i>1st Quarter 2008</i>	<i>1st Quarter 2007</i>
Breast only	475	510
Bottle only	275	256
Mixed (Breast & Bottle)	81	145
Other*	11	12
Unspecified	133	0

* 'Other' - include babies who are still at hospital after 28 days and those who die before discharge

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Mater Dei Hospital, Tal-Qroqq l/o Msida

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St. James Hospital, Sliema

St. James Hospital, Zabbar

St. Philip's Hospital, Sta Venera.