



NATIONAL OBSTETRIC INFORMATION SYSTEM (NOIS)

MALTA

First Quarterly Report: January to March 2011

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<http://bit.ly/birthsmalta>

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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 DHIR on a regular basis. At the DHIR 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.

Report analysis

This report analyses the national maternities/deliveries and infant births that occurred in the first quarter of 2011 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 deliveries (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.

ANALYSIS

There were a total of 1064 maternities/deliveries registered in the Maltese Islands for the first quarter of 2011, which resulted in a total of 1098 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 96 births (1002 births reported in 1st quarter 2010).

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 2011, the greatest number of deliveries 389 (36.6%), occurred in the 30-34 year age group, while there were no deliveries in the age group <15 years and 2 in the 45 and over age group. The minimum age of the mothers was 15 years while the maximum age was 45 years. The most frequent age at delivery was 30 years, and the average age at delivery was 29 years.

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 2011</i>		<i>1st Quarter 2010</i>	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
<15	0	0.0	2	0.2
15-19	55	5.2	69	7.0
20-24	128	12.0	138	14.0
25-29	320	30.1	311	31.6
30-34	389	36.6	306	31.1
35-39	152	14.3	135	13.7
40-44	18	1.7	23	2.3
45+	2	0.2	1	0.1
Unspecified	0	0.0	0	0.0

Marital Status:

For the first quarter of 2011, 22.1% (235) of all deliveries occurred to mothers who were reported as single (never married); while 74.3% (791) of all deliveries occurred to mothers reported as married, and 3.4% (36) of mothers were reported as widowed / separated or divorced. Marital status was not specified for two deliveries.

In the first quarter of 2011, all mothers were registered as having 'Support at home to raise the infant'.

Nationality:

88.2% (938) of all deliveries this quarter occurred to women of Maltese nationality, while 11.5% (122) were of known non-Maltese nationality. In the remaining 0.4% (4) nationality was not specified.

Parity:

In the first quarter of 2011, there were 51.1% (544) of mothers who were primiparas while 48.9% (520) were multiparas having had one or more live and/or stillbirths before current pregnancy.

MATERNAL LIFESTYLES

There were 72 (6.8%) mothers who were reported to smoke during pregnancy in the first quarter of this year. Four were reported to drink alcohol and 7 were reported as being illicit drug abusers.

The following table gives the smoking, alcohol and drug habits of mothers for the first quarters of 2011 and 2010.

Maternal Lifestyles	1st Quarter 2011	1st Quarter 2010
	No.	No.
Cigarette smoking during pregnancy:		
1 to 3/day	21	2
>than 3/day	51	75
Do not smoke	991	908
Unspecified	1	0
Alcohol consumption during pregnancy:		
Up to 1unit/day	3	0
>than 1unit/day	1	0
None	1059	985
Unspecified	1	0
Illicit Drug Abuse during pregnancy		
Yes	7	4
No	1056	981
Unspecified	1	0

SPECIAL CONDITIONS OF PREGNANCY

In the first quarter of 2011, there were 28 cases of assisted reproduction (ART) reported, this includes all forms of ART namely ovulation stimulation, IVF and ICSI (13 cases of ART reported in 1st quarter 2010).

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 7.4% of mothers who were registered as having gestational hypertension in the first quarter of 2011.

Conditions recorded during pregnancy	1st Quarter 2011		1st Quarter 2010	
	Frequency	%	Frequency	%
Antepartum Haemorrhage	21	2.0	15	1.5
Gestational hypertension	79	7.4	47	4.8
Pre-eclampsia	4	0.4	9	0.9
Eclampsia	0	0.0	0	0.0
Placenta praevia	14	1.3	10	1.0
Abruption of placenta	4	0.4	3	0.3
Cardiovascular disease	9	0.8	5	0.5

Diabetes in Pregnancy

In the first quarter of this year, there were 4 mothers who were reported as having Insulin Dependent Diabetes before the current pregnancy, none were reported as having NIDDM before pregnancy. In addition, there were a total of 41 mothers registered with gestational diabetes who were controlled without the use of insulin, and none were registered as having gestational diabetes treated with insulin.

CATEGORY OF MATERNITY ACCORDING TO DELIVERY

For the first quarter of 2011, there were a total of 1037 (97.5%) singleton and 22 (2.1%) twin deliveries, there were 5 triplet deliveries and no quadruplet deliveries.

<i>Category</i>	<i>1st Quarter 2011</i>	<i>1st Quarter 2010</i>
Singleton	1037	970
Twin	22	13
Triplet	5*	2
Quadruplet	0	0

*In one of these triplet deliveries the first triplet was born at the end of 2010 and the other 2 sibs were born early in 2011.

INFANT BIRTHS

TOTAL INFANT BIRTHS AND GENDER DISTRIBUTION

In the first quarter of this year, there were a total of 1098 infant births. All infant births of 22 weeks gestation are included in the register.

Uncharacteristically, there were more female infants born than male, the gender distribution for this quarter was 534 (48.6%) males and 564 (51.4%) females (*1st quarter 2010: males –516; females – 486*).

INFANTS AND METHOD OF BIRTH

Of the 1098 infants born, 653 (59.5%) were delivered as a vertex delivery, 389 (35.4%) by emergency or elective Caesarean Section and 56 (5.1%) by assisted vaginal delivery (includes forceps, ventouse and breech).

<i>Method of Birth*</i>	<i>1st Quarter 2011</i>	<i>1st Quarter 2010</i>
Infants delivered by vertex delivery	653	657
Infants delivered by emergency/elective Caesarean Section	389	319
Infants delivered by forceps	1	4
Infants delivered by ventouse	53	22
Breech deliveries	2	0

*Data analysed according to total infant births

This quarter there were 389 babies born by caesarean section but 356 caesarean deliveries performed, this due to the fact that a number of caesarians are done in multiple birth deliveries. The Caesarean section operation rate was 33.5% of the total maternal deliveries (1064) this quarter.

INFANT BIRTH WEIGHTS

In the first quarter of 2011, there were 979 (89.2%) of the total births that occurred in the birth weight range of 2500g to 4499g. 90 (8.2%) of the total births were in the low birth weight range of 1500g to 2499g, 25 (2.3%) of births were of very low birth weight 500g to 1499g. In 1 case the birth weight was unspecified. 3 babies were reported with a birth weight between 4500 and 4999g. None were 5000g or more.

<i>Birth weights</i>	<i>1st Quarter 2011</i>	<i>1st Quarter 2010</i>
<500g	0	0
500-999g	10	1
1000-1499g	15	11
1500-1999g	17	11
2000-2499g	73	54
2500-2999g	208	242
3000-3499g	472	403
3500-3999g	251	227
4000-4499g	48	49
4500-4999g	3	3
5000+	0	0
Unspecified	1	1
Average Birth weight (g)	3167	3195

OUTCOME OF BIRTH

The number of live births for the first quarter of this year was 1092 which accounted for 99.5% of the total births at a national level. The remaining 6 births were stillbirths.

<i>Outcome of Birth</i>	<i>1st Quarter 2011</i>	<i>1st Quarter 2010</i>
Babies born alive	1092	998
Stillbirths	6	4

Of the 1092 live births this quarter, there were 3 early neonatal deaths and 2 late neonatal deaths.

<i>Neonatal Deaths</i>	<i>1st Quarter 2011</i>	<i>1st Quarter 2010</i>
Early Neonatal deaths	3	6
Late Neonatal deaths	2	1

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 2011</i>	<i>1st Quarter 2010</i>
Breast only	641	557
Bottle only	295	312
Mixed (Breast & Bottle)	151	123
Other*	11	10
Unspecified	0	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

Gozo General Hospital, Victoria

St. James Hospital, Sliema

St. James Hospital, Zabbar