



NATIONAL OBSTETRIC INFORMATION SYSTEM (NOIS)

MALTA

First Quarterly Report: January to March 2010

***Department of Health Information and Research (DHIR)
National Obstetric Information System (NOIS), Malta***

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NOIS Registry team:

Public Health Specialist (Contact person):

Dr. Miriam Gatt

Data management:

Ms. V. Parnis

Ms. M. Mallia

Mr. Malcolm Bartolo

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 and St. Philip's Hospital.

Report analysis

This report analyses the national maternities/deliveries and infant births that occurred in the first quarter of 2010 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.

ANALYSIS

There were a total of 985 maternities/deliveries registered in the Maltese Islands for the first quarter of 2010, which resulted in a total of 1002 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 9 births (993 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 2010, the greatest number of deliveries 311 (31.6%), occurred in the 25-29 year age group, while there were 2 deliveries in the age group <15 years and 1 in the 45 and over age group. The minimum age of the mothers was 14 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 2010</i>		<i>1st Quarter 2009</i>	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
<15	2	0.2	2	<1
15-19	69	7.0	64	6.5
20-24	138	14.0	147	14.9
25-29	311	31.6	341	34.6
30-34	306	31.1	314	31.9
35-39	135	13.7	99	10.1
40-44	23	2.3	18	1.8
45+	1	0.1	0	0
Unspecified	0	0.0	0	0

Marital Status:

For the first quarter of 2010, 24.9% (245) of all deliveries occurred to mothers who were reported as single (never married); while 71.6% (705) of all deliveries occurred to mothers reported as married, and 3.5% (34) of mothers were reported as widowed / separated or divorced. Marital status was not specified for one delivery.

In the first quarter of 2010, all mothers were registered as having 'Support at home to raise the infant'.

Nationality:

90.3% (889) of all deliveries this quarter occurred to women of Maltese nationality, while 9.4% (93) were of known non-Maltese nationality. In the remaining 0.3% (3) nationality was not specified.

Parity:

In the first quarter of 2010, there were 51.9% (511) of mothers who were primiparas while 48.1% (474) were multiparas having had one or more live and/or stillbirths before current pregnancy.

MATERNAL LIFESTYLES

There were 77 (7.8%) mothers who were reported to smoke during pregnancy in the first quarter of this year. None were reported to drink excessive alcohol and 4 were reported as being illicit drug abusers.

The following table gives the smoking, alcohol and drug habits of mothers for the first quarters of 2010 and 2009.

Maternal Lifestyles	1st Quarter 2010	1st Quarter 2009
	No.	No.
Cigarette smoking during pregnancy:		
1 to 3/day	2	35
>than 3/day	75	64
Do not smoke	908	884
Unspecified	0	2
Alcohol consumption during pregnancy:		
Up to 1unit/day	0	0
>than 1unit/day	0	0
None	985	983
Unspecified	0	2
Illicit Drug Abuse during pregnancy		
Yes	4	4
No	981	979
Unspecified	0	2

SPECIAL CONDITIONS OF PREGNANCY

In the first quarter of 2010, there were 13 cases of assisted reproduction (ART) reported, this includes all forms of ART namely ovulation stimulation, IVF and ICSI (7 cases of ART reported in 1st quarter 2009).

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 4.8% of mothers who were registered as having gestational hypertension in the first quarter of 2010.

Conditions recorded during pregnancy	1st Quarter 2010		1st Quarter 2009	
	Frequency	%	Frequency	%
Antepartum Haemorrhage	15	1.5	19	1.9
Gestational hypertension	47	4.8	79	8.0
Pre-eclampsia	9	0.9	11	1.1
Eclampsia	0	0.0	1	0.1
Placenta praevia	10	1.0	14	1.4
Abruption of placenta	3	0.3	2	0.2
Cardiovascular disease	5	0.5	3	0.3

Diabetes in Pregnancy

In the first quarter of this year, there were 3 mothers who were reported as having Insulin Dependent Diabetes before the current pregnancy, 1 was reported as having NIDDM before pregnancy. In addition, there were a total of 54 mothers registered with gestational diabetes who were controlled without the use of insulin, and there were 2 mothers registered as having

gestational diabetes treated with insulin.

CATEGORY OF MATERNITY ACCORDING TO DELIVERY

For the first quarter of 2010, there were a total of 970 (98.5%) singleton and 13 (1.3%) twin deliveries, there were 2 triplet deliveries and no quadruplet deliveries.

<i>Category</i>	<i>1st Quarter 2010</i>	<i>1st Quarter 2009</i>
Singleton	970	977
Twin	13	8
Triplet	2	0
Quadruplet	0	0

INFANT BIRTHS

TOTAL INFANT BIRTHS AND GENDER DISTRIBUTION

In the first quarter of this year, there were a total of 1002 infant births. All infant births of 22 weeks gestation or 500g birth weight are included in the register.

There were more male infants born than female, the gender distribution for this quarter was 516 (51.5%) males and 486 (48.5%) females (*1st quarter 2009: males –512; females – 481*).

INFANTS AND METHOD OF BIRTH

Of the 1002 infants born, 657 (65.6%) were delivered as a vertex delivery, 319 (31.8%) by emergency or elective Caesarean Section and 26 (2.6%) by assisted vaginal delivery (includes forceps, ventouse and breech).

<i>Method of Birth*</i>	<i>1st Quarter 2010</i>	<i>1st Quarter 2009</i>
Infants delivered by vertex delivery	657	676
Infants delivered by emergency/elective Caesarean Section	319	281
Infants delivered by forceps	4	4
Infants delivered by ventouse	22	32
Breech deliveries	0	0

**Data analysed according to total infant births*

This quarter there were 319 babies born by caesarean section but 302 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 30.7% of the total maternal deliveries (985) this quarter.

INFANT BIRTH WEIGHTS

In the first quarter of 2010, there were 921 (91.9%) of the total births that occurred in the birth weight range of 2500g to 4499g. 65 (6.5%) of the total births were in the low birth weight range of 1500g to 2499g, 12 (1.2%) 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 2010</i>	<i>1st Quarter 2009</i>
<500g	0	2*
500-999g	1	3
1000-1499g	11	7
1500-1999g	11	8
2000-2499g	54	56
2500-2999g	242	225
3000-3499g	403	409
3500-3999g	227	235
4000-4499g	49	37
4500-4999g	3	6
5000+	0	2
Unspecified	1	3
Average Birth weight (g)	3195	3203

*Babies of 22 weeks gestation but extremely low birth weight, both suffered perinatal death.

OUTCOME OF BIRTH

The number of live births for the first quarter of this year was 998 which accounted for 99.6% of the total births at a national level. The remaining 4 births were stillbirths.

<i>Outcome of Birth</i>	<i>1st Quarter 2010</i>	<i>1st Quarter 2009</i>
Babies born alive	998	988
Stillbirths	4	5

Of the 998 live births this quarter, there were 6 early neonatal deaths and 1 late neonatal death registered.

<i>Neonatal Deaths</i>	<i>1st Quarter 2010</i>	<i>1st Quarter 2009</i>
Early Neonatal deaths	6	4
Late Neonatal deaths	1	2

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 2010</i>	<i>1st Quarter 2009</i>
Breast only	557	550
Bottle only	312	330
Mixed (Breast & Bottle)	123	103
Other*	10	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

St. Philip's Hospital, Sta Venera.