



NATIONAL OBSTETRIC INFORMATION SYSTEM (NOIS)

MALTA

First Quarterly Report: January to March 2009

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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 2009 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 2009, which resulted in a total of 993 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 18 births (975 births reported in 1st quarter 2008).

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 2009, the greatest number of deliveries 341 (34.6%), occurred in the 25-29 year age group, while there were 2 deliveries in the age group <15 years and none in the 45 and over age group. The minimum age of the mothers was 14 years while the maximum age was 44 years. The most frequent age at delivery was 27 years, and the average age at delivery was 28 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>Ist Quarter 2009</i>		<i>Ist Quarter 2008</i>	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
<15	2	<1	2	<1
15-19	64	6.5	61	6
20-24	147	14.9	141	15
25-29	341	34.6	333	35
30-34	314	31.9	308	32
35-39	99	10.1	100	10
40-44	18	1.8	15	2
45+	0	0	1	<1
Unspecified	0	0	0	0

Marital Status:

For the first quarter of 2009, 25.5% (251) of all deliveries occurred to mothers who were reported as single (never married); while 71.1% (700) 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 specified for all deliveries.

In the first quarter of 2009, no mothers were registered as not having ‘Support at home to raise the infant’.

Nationality:

90.6% (892) of all deliveries this quarter occurred to women of Maltese nationality, while 8.9% (88) were of known non-Maltese nationality. In the remaining 0.5% (5) nationality was not specified.

Parity:

In the first quarter of 2009, there were 53.1% (523) of mothers who were primiparas while 46.9% (462) were multiparas having had one or more live and/or stillbirths before current pregnancy.

MATERNAL LIFESTYLES

There were 99 (10.1%) 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 were reported as being drug abusers.

The following table gives the smoking, alcohol and drug habits of mothers for the first quarters of 2009 and 2008. In the first quarter of 2008, Mater Dei Hospital encountered problems with data collection and this explains the higher number of unknown / unspecified variables.

Maternal Lifestyles	1st Quarter 2009	1st Quarter 2008
	<i>No.</i>	<i>No.</i>
Cigarette smoking during pregnancy:		
1 to 3/day	35	14
>than 3/day	64	34
Do not smoke	884	750
Unspecified	2	163
Alcohol consumption during pregnancy:		
Up to 1unit/day	0	1
>than 1unit/day	0	0
None	983	797
Unspecified	2	163
Drug Abuse during pregnancy		
Yes	4	4
No	979	794
Unspecified	2	163

SPECIAL CONDITIONS OF PREGNANCY

In the first quarter of 2009, there were 7 cases of assisted reproduction (ART) reported, this includes all forms of ART namely ovulation stimulation, IVF and ICSI (12 cases of ART reported in 1st quarter 2008).

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 8.0% of mothers who were registered as having gestational hypertension in the first quarter of 2009.

Conditions recorded during pregnancy	1st Quarter 2009			1st Quarter 2008		
	<i>No</i>	<i>Yes</i>	<i>Unspecified</i>	<i>No</i>	<i>Yes</i>	<i>Unspecified</i>
Antepartum Haemorrhage	966	19	0	809	24	128
Gestational hypertension	906	79	0	773	62	126
Pre-eclampsia	974	11	0	818	15	128
Placenta praevia	971	14	0	816	18	127
Abruption of placenta	983	2	0	831	2	128
Cardiovascular disease	982	3	0	829	3	129

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, 2 were reported as having NIDDM before pregnancy. In addition, there was a total of 52 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 2009, there were a total of 977 (99.2%) singleton and 8 (0.8%) twin deliveries, there were no triplet or quadruplet deliveries.

<i>Category</i>	<i>1st Quarter 2009</i>	<i>1st Quarter 2008</i>
Singleton	977	948
Twin	8	12
Triplet	0	1
Quadruplet	0	0

INFANT BIRTHS

TOTAL INFANT BIRTHS AND GENDER DISTRIBUTION

In the first quarter of this year, there were a total of 993 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 512 (51.6%) males and 481 (48.4%) females. There was one birth for which the gender was undetermined (*1st quarter 2008: males –501; females – 473*).

INFANTS AND METHOD OF BIRTH

Of the 993 infants born, 676 (68.1%) were delivered as a vertex delivery, 281 (28.3%) by emergency or elective Caesarean Section and 36 (3.6%) by assisted vaginal delivery (includes forceps, ventouse and breech).

<i>Method of Birth*</i>	<i>1st Quarter 2009</i>	<i>1st Quarter 2008</i>
Infants delivered by vertex delivery	676	604
Infants delivered by emergency/elective Caesarean Section	281	319
Infants delivered by forceps	4	2
Infants delivered by ventouse	32	49
Breech deliveries	0	1

**Data analysed according to total infant births*

This quarter there were 281 babies born by caesarian section but 274 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 27.8% of the total maternal deliveries (985) this quarter.

INFANT BIRTH WEIGHTS

In the first quarter of 2009, there were 912 (91.8%) of the total births that occurred in the birth weight range of 2500g to 4999g. 64 (6.4%) of the total births were in the low birth weight range of 1500g to 2499g, 10 (1.0%) of births were of very low birth weight 500g to 1499g. In 3 cases the birth weight was unspecified. A stillbirth and one very early neonatal death were reported with gestation of 22 weeks but birth weight of less than 500g. 2 babies were reported with a birth weight of 5000g or more.

<i>Birth weights</i>	<i>1st Quarter 2009</i>	<i>1st Quarter 2008</i>
<500g	2*	1*
500-999g	3	5
1000-1499g	7	7
1500-1999g	8	7
2000-2499g	56	43
2500-2999g	225	214
3000-3499g	409	422
3500-3999g	235	214
4000-4499g	37	39
4500-4999g	6	4
5000+	2	0
Unspecified	3	19
Average Birth weight (g)	3203	3194

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

OUTCOME OF BIRTH

The number of live births for the first quarter of this year was 988 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 2009</i>	<i>1st Quarter 2008</i>
Babies born alive	988	970
Stillbirths	5	5

Of the 988 live births this quarter, there were 4 early neonatal deaths and 2 late neonatal deaths registered.

<i>Neonatal Deaths</i>	<i>1st Quarter 2009</i>	<i>1st Quarter 2008</i>
Early Neonatal deaths	4	5
Late Neonatal deaths	2	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 2009</i>	<i>1st Quarter 2008</i>
Breast only	550	475
Bottle only	330	275
Mixed (Breast & Bottle)	103	81
Other*	10	11
Unspecified	0	133

* '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.