



## ***NATIONAL OBSTETRIC INFORMATION SYSTEM (NOIS)***

***MALTA***

*Third Quarterly Report: July to September 2004*

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## **NATIONAL OBSTETRIC INFORMATION SYSTEMS (NOIS)**

A national obstetric information system was launched in 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. Once the data are recorded, the sheets are forwarded to the DHI on a weekly basis. At the DHI the relevant sheets are processed and entered into the NOIS database.

The maternity centres actively participating in this information system are: St. Lukes 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 third quarter of this year and 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 975 maternities/deliveries registered in the Maltese islands for the third quarter of 2004, which resulted in a total of 999 infant births.

Comparing these figures with those reported for the same period last year one can see that the number of infant births decreased by 71 births (*1070 births reported in 3<sup>rd</sup> quarter 2003*).

## **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 third quarter of this year, the greatest number of deliveries (37%), occurred in the age group 25 to 29 years while the lowest number of deliveries (<1%) occurred in the age group <15 years. There were no deliveries in the 45+ 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 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>3<sup>rd</sup> Quarter 2004</i>		<i>3<sup>rd</sup> Quarter 2003</i>	
	<i>Frequency</i>	<i>%</i>	<i>Frequency</i>	<i>%</i>
<15	1	<1	-	-
15-19	72	7	62	6
20-24	191	20	213	20
25-29	356	37	388	36
30-34	250	26	289	27
35-39	83	9	83	8
40-44	22	2	20	2
45+	0	0	1	<1
Unspecified	0	0	7	1

*Marital Status:*

For the third quarter of this year, 18% (176) of all deliveries occurred to mothers who were never married (single); while 79% (775) of all deliveries occurred to mothers who were married once (married, widowed, separated). The remaining 3% (24) of deliveries had no marital status specified.

In the third quarter 2004, according to the data registered in NOIS, of the 176 mothers who have never been married, 175 were registered as having 'Support at home to raise the infant', for one mother this data was not specified.

*Nationality:*

91% (891) of all deliveries this quarter, occurred to women of Maltese nationality while 5% (51) were Non-Maltese. In the remaining 3% (33) nationality was not specified.

*Parity:*

There were 52% (511) of mothers who were primiparas while 48% (464) were multiparas in the third quarter of this year.

***MATERNAL LIFESTYLES***

There were 8% (80) of mothers who were reported to smoke one or more cigarettes during pregnancy in the third quarter of this year. None were reported to drink alcohol and 5 (0.5%) were reported as being drug abusers.

The following table gives the smoking, alcohol and drug habits of mothers for the third quarters of 2004 and 2003.

<i>Maternal Lifestyles</i>	<i>3<sup>rd</sup> Quarter 2004</i>	<i>3<sup>rd</sup> Quarter 2003</i>
	<i>No.</i>	<i>No.</i>
<b><i>Cigarette smoking during pregnancy:</i></b>		
1 to 3/day	27	6
>than 3/day	53	38
Do not smoke	891	990
Unspecified	4	29
<b><i>Alcohol consumption during pregnancy:</i></b>		
Up to 1unit/day	-	-
>than 1unit/day	-	-
None	973	1035
Unspecified	2	28
<b><i>Drug Abuse during pregnancy</i></b>		
Yes	5	1
No	968	1035
Unspecified	2	27

### ***PATHOLOGY DURING PREGNANCY***

The table below gives the number of mothers for the third quarters of this year and 2003, recorded with a specific obstetric pathology during pregnancy.

The most frequently recorded pathology during pregnancy was gestational hypertension, there were in fact 6% of mothers who were registered as having gestational hypertension this quarter.

<i>Pathology recorded during pregnancy</i>	<i>3<sup>rd</sup> Quarter 2004</i>			<i>3<sup>rd</sup> Quarter 2003</i>		
	<i>Yes</i>	<i>None</i>	<i>Unspec.</i>	<i>Yes</i>	<i>No</i>	<i>Unspec.</i>
Antepartum Haemorrhage	13	962	0	10	1046	7
Gestational hypertension	61	913	1	85	971	7
Pre-eclampsia	5	970	0	9	1047	7
Placenta praevia	4	971	0	5	1051	7
Abruption of placenta	2	973	0	4	1052	7
Assisted fertilisation (ART)	18	956	1	8	1047	8
Cardiovascular disease	0	967	8	1	1055	7

### ***DIABETES IN PREGNANCY***

In the third quarter of this year, there were 4 mothers who were reported as being Insulin Dependent Diabetic before this pregnancy while there were no mothers reported with Non-Insulin Dependent diabetes prior to pregnancy. In addition, there were a total of 21 mothers registered with gestational diabetes who were controlled without the use of insulin, and 2 mothers registered as having gestational diabetes treated with insulin.

**ULTRASONOGRAPHY**

487 (50%) of the mothers were reported to have had one or two ultrasounds carried out during pregnancy while 60 (6%) had more than five scans. For 215 (22%) of mothers, the number of ultrasounds taken was unspecified or unknown. The table below gives the number and rate of ultrasound scans carried out during pregnancy.

<i>No. of Scans</i>	<i>3<sup>rd</sup> Quarter 2004</i>		<i>3<sup>rd</sup> Quarter 2003</i>	
	<i>No.</i>	<i>%</i>	<i>No.</i>	<i>%</i>
1	255	26	243	23
2	232	24	326	31
3	136	14	249	23
4	76	8	98	9
5 or more	60	6	63	6
None	1	<1	-	-
Unspecified / unknown	215	22	84	8

**CATEGORY OF MATERNITY ACCORDING TO DELIVERY**

For the third quarter of this year, there were a total of 957 (98%) singleton and 14 (1.4%) twin deliveries, 2 triplet and 2 quadruplet deliveries.

<i>Category</i>	<i>3<sup>rd</sup> Quarter 2004</i>	<i>3<sup>rd</sup> Quarter 2003</i>
Singleton	957	1058
Twin	14	3
Triplet	2	2
Quadruplet	2	-

**INFANT BIRTHS**

**INFANTS AND METHOD OF BIRTH**

In the third quarter of this year, there was a total of 999 infant births. Of these 666 (67%) were delivered as a vertex delivery, 288 (29%) by emergency or elective Caesarean Section and 45 (5%) by assisted vaginal delivery (includes forceps, ventouse and breech).

<i>Method of Birth*</i>	<i>3<sup>rd</sup> Quarter 2004</i>	<i>3<sup>rd</sup> Quarter 2003</i>
Infants delivered by vertex delivery	666	747
Infants delivered by emergency/elective Caesarean Section	288	279
Infants delivered by forceps	6	3
Infants delivered by ventouse	39	41
Breech deliveries	0	0

*\*Data analysed according to total infant births*

This quarter there were 288 babies delivered by caesarian section but 266 caesarian operations performed, this due to the fact that a number of caesarians are done in multiple birth deliveries. The Caesarean section operation rate is 27% of the total maternal deliveries (975) this quarter.

**BIRTHWEIGHTS AND GENDER OF BIRTHS**

In the third quarter of 2004, there were 908 (91%) of the total births that occurred in the birth weight range of 2500g to 4999g. 76 (8%) of the total births were in the low birth weight range of 1500g to 2499g, while 15 (2%) of births were of very low birth weight 500g to 1499g. In addition there were 3 babies of birth weight over 4500g.

<i>Birthweights</i>	<i>3<sup>rd</sup> Quarter 2004</i>	<i>3<sup>rd</sup> Quarter 2003</i>
<500g	0	0
500-999g	6	4
1000-1499g	9	5
1500-1999g	20	17
2000-2499g	56	57
2500-2999g	223	211
3000-3499g	401	488
3500-3999g	234	233
4000-4499g	47	49
4500+	3	5
Unspecified	0	2
Average Birthweight (g)	3182	3215

The male and female distribution of births in the 3<sup>rd</sup> quarter of 2004 was 528 and 471 respectively.

**OUTCOME OF BIRTH**

The number of live births for the third quarter of this year was 997 which accounted for 99.8% of the total birth rate at a national level. The remaining 2 births were stillbirths. There were 5 cases of early neonatal deaths and 4 cases of late neonatal deaths (see table below).

<i>Outcome of Birth</i>	<i>3<sup>rd</sup> Quarter 2004</i>	<i>3<sup>rd</sup> Quarter 2003</i>
Babies born alive	997	1068
Stillbirths	2	2
Early Neonatal deaths	5	2
Late Neonatal deaths	4	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>3<sup>rd</sup> Quarter 2004</i>	<i>3<sup>rd</sup> Quarter 2003</i>
Breast only	547	574
Bottle only	322	375
Mixed (Breast & Bottle)	112	106
Other*	13	5
Unspecified	5	10

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

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St. Luke's / Karin Grech Hospital, Pieta

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St. James Hospital, Sliema

St. James Hospital, Zabbar

St. Philip's Hospital, Sta Venera.