



NATIONAL OBSTETRIC INFORMATION SYSTEM (NOIS)

MALTA

Second Quarterly Report: April to June 2012

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National Obstetric Information System (NOIS), Malta*

https://ehealth.gov.mt/HealthPortal/chief_medical_officer/healthinfor_research/registries/births.aspx

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NATIONAL OBSTETRIC INFORMATION SYSTEMS (NOIS)

Background

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.

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 DHIR on a regular basis. At the DHIR the relevant sheets are processed and entered into the NOIS database. All 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 second quarter of 2012 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. All births, live or still, of gestation 22 weeks and above are registered and analysed in this report.

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.

This report provides basic statistics regarding births and deliveries in the Maltese Islands. If required, further information and details may be obtained from our website: https://ehealth.gov.mt/HealthPortal/chief_medical_officer/healthinfor_research/registries/births.aspx or by e-mail: healthinfo@gov.mt .

ANALYSIS

There were a total of 951 maternities/deliveries registered in the Maltese Islands for the second quarter of 2012, which resulted in a total of 962 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 13 births (949 births reported in 2nd quarter 2011).

MATERNITIES / DELIVERIES

MATERNAL AGE, MARITAL STATUS, NATIONALITY AND PARITY

Maternal Age:

The maternities have been grouped according to standard age groupings and the frequency distribution of deliveries according to maternal age at delivery has been analysed. In the second quarter of 2012, the greatest number of deliveries 333 (35.0%), occurred in the age group 30-34 years, followed by the 25-29 year age group (29.2%). There were no deliveries in the age group <15 years and 2 deliveries in the 45+ age group. The minimum age of mothers at delivery was 15 years while the maximum age was 46 years. The most frequent age at delivery was 30 years and the average age at delivery was 29.6 years.

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

Table 1- Deliveries according to maternal age group

| Age in years | 2 nd Quarter 2012 | | 2 nd Quarter 2011 | |
|--------------|------------------------------|------|------------------------------|------|
| | Frequency | % | Frequency | % |
| <15 | 0 | 0 | 0 | 0.0 |
| 15-19 | 39 | 4.1 | 46 | 4.9 |
| 20-24 | 132 | 13.9 | 120 | 12.9 |
| 25-29 | 278 | 29.2 | 328 | 35.2 |
| 30-34 | 333 | 35.0 | 298 | 32.0 |
| 35-39 | 147 | 15.5 | 117 | 12.6 |
| 40-44 | 20 | 2.1 | 20 | 2.1 |
| 45+ | 2 | 0.2 | 3 | 0.3 |
| Unspecified | 0 | 0 | 0 | 0 |

Marital Status:

For the second quarter of 2012, 23.9% (227) of all deliveries occurred to mothers who were reported as single (never married); while 72.5% (689) of all deliveries occurred to mothers reported as married, and 3.7% (35) of mothers were reported as widowed, separated or divorced. Marital status was specified for all mothers.

In the second quarter of 2012, all mothers were registered as having 'Support at home to raise the infant'.

Nationality:

87.5% (832) of all deliveries this quarter, occurred to women of Maltese nationality while 12.5% (119) were Non-Maltese. Nationality was specified for all mothers.

Parity:

There were 51.0% (485) of mothers who were primiparas (ie. delivering for the first time) while 49.0% (466) were multiparas (ie. having already delivered at least one baby, live or still) in the second quarter of 2012.

MATERNAL LIFESTYLES

There were 71 (7.5%) mothers who were reported to smoke one or more cigarettes during pregnancy in the second quarter of this year. None were reported to drink alcohol and 7 were reported to be drug abusers.

The following table gives the smoking, alcohol and drug habits of mothers for the second quarters of 2012 and 2011.

Table 2 – Maternal lifestyles

| | <i>2nd Quarter 2012</i> | | <i>2nd Quarter 2011</i> | |
|--|------------------------------------|--|------------------------------------|--|
| | <i>No.</i> | | <i>No.</i> | |
| <i>Cigarette smoking during pregnancy</i> | | | | |
| 1 to 3/day | 18 | | 31 | |
| > than 3/day | 53 | | 44 | |
| Do not smoke | 880 | | 856 | |
| Unspecified | 0 | | 1 | |
| <i>Alcohol consumption during pregnancy</i> | | | | |
| Up to 1unit/day | 0 | | 0 | |
| > than 1unit/day | 0 | | 0 | |
| None | 951 | | 931 | |
| Unspecified | 0 | | 1 | |
| <i>Drug Abuse during pregnancy</i> | | | | |
| Yes | 7 | | 4 | |
| No | 944 | | 927 | |
| Unspecified | 0 | | 1 | |

SPECIAL CONDITIONS OF PREGNANCY

In the second quarter of 2012, there were 7 cases of assisted reproduction (ART) reported, this includes all forms of ART namely ovulation stimulation, IVF and ICSI (*13 cases of ART were reported in 2nd quarter 2011*).

The table below gives the number and frequency of mothers recorded with specific obstetric conditions during pregnancy. The most frequently recorded was gestational hypertension; in fact 4.8% of mothers were registered as having gestational hypertension in the second quarter of 2012.

Table 3 – Pregnancy related conditions

| | <i>2nd Quarter 2012</i> | | <i>2nd Quarter 2011</i> | |
|---------------------------------|------------------------------------|----------|------------------------------------|----------|
| | <i>Frequency</i> | <i>%</i> | <i>Frequency</i> | <i>%</i> |
| Antepartum Haemorrhage | 15 | 1.6 | 25 | 2.7 |
| Gestational hypertension | 46 | 4.8 | 42 | 4.5 |
| Pre-eclampsia | 6 | 0.6 | 7 | 0.8 |
| Eclampsia | 0 | 0 | 0 | 0 |
| Placenta praevia | 8 | 0.8 | 16 | 1.7 |
| Abruption of placenta | 2 | 0.2 | 2 | 0.2 |

Diabetes in Pregnancy

In the second quarter of this year, there were 6 mothers who were reported as being Insulin Dependent Diabetics before the current pregnancy while 5 mothers were reported with Non-Insulin Dependent diabetes prior to pregnancy. In addition, there were a total of 46 mothers registered with gestational diabetes who were controlled without the use of insulin, and no mothers were registered as having gestational diabetes treated with insulin.

DELIVERIES ACCORDING TO PLURALITY

For the second quarter of 2012, there were a total of 940 (98.8%) singleton, 11 (1.2%) twin and no triplet deliveries.

Table 4 –Delivery by Plurality

| | <i>2nd Quarter 2012</i> | <i>2nd Quarter 2011</i> |
|------------|------------------------------------|------------------------------------|
| Singleton | 940 | 917 |
| Twin | 11 | 13 |
| Triplet | 0 | 2 |
| Quadruplet | 0 | 0 |

INFANT BIRTHS

TOTAL INFANT BIRTHS AND GENDER DISTRIBUTION

In the second quarter of this year, there were a total of 962 infant births.

There were more male infants born than female, the gender distribution for this quarter was 515 (53.5%) males and 447 (46.5%) females (*2nd quarter 2011: males –480; females – 469*).

INFANTS AND METHOD OF BIRTH

Of the 962 infants born, 606 (63.0%) were delivered as unassisted vertex delivery, 314 (32.6%) by emergency or elective Caesarean Section and 42 (4.4%) by assisted vaginal delivery (this includes forceps, ventouse and breech deliveries).

Table 5 – Distribution of births by method of delivery

| | <i>2nd Quarter 2012</i> | <i>2nd Quarter 2011</i> |
|---|------------------------------------|------------------------------------|
| Vaginal vertex delivery | 606 | 596 |
| Emergency/elective Caesarean Section | 314 | 318 |
| Forceps delivery | 2 | 2 |
| Ventouse | 40 | 33 |
| Breech | 0 | 0 |

**Data analysed according to total infant births*

This quarter there were 314 babies born by caesarian section but 303 caesarean deliveries performed, this due to the fact that a number of caesareans are done in multiple birth deliveries. The Caesarean section operation rate was 31.9% of the total maternal deliveries (951) this quarter.

BIRTHS BY GESTATIONAL AGE CATEGORY

This quarter there were 64 (6.7%) preterm babies of less than 37 weeks gestation. 12 (1.2%) were very preterm being less than 32 weeks of gestation.

Table 6 – Distribution by gestational age categories

| | <i>2nd Quarter 2012</i> | <i>2nd Quarter 2011</i> |
|--|------------------------------------|------------------------------------|
| Extremely Preterm (22 - 27 wks) | 6 | 5 |
| Very Preterm (28 - 31 wks) | 6 | 10 |
| Moderately Preterm (32 - 36wks) | 52 | 62 |
| Term (37 - 41wks) | 896 | 871 |
| Post term (>41 wks) | 2 | 1 |
| Unknown | 0 | 0 |

INFANT BIRTH WEIGHTS

In the second quarter of 2012, there were 915 (95.1%) of the total births that occurred in the birth weight range of 2500g to 4999g, 36 (3.7%) of the total births were in the low birth weight range of 1500g to 2499g, 6 (0.6%) of births were of very low birth weight 500g to 1499g. There were 4 infants with birth weight below 500g but gestation 22weeks+ and 1 baby with birth weight over 5000g. In all cases the birth weight was specified.

Table 7 – Births by birth weight

| | <i>2nd Quarter 2012</i> | <i>2nd Quarter 2011</i> |
|---------------------------------|------------------------------------|------------------------------------|
| <500g | 4 | 4 |
| 500-999g | 2 | 3 |
| 1000-1499g | 4 | 6 |
| 1500-1999g | 7 | 20 |
| 2000-2499g | 29 | 43 |
| 2500-2999g | 192 | 201 |
| 3000-3499g | 442 | 411 |
| 3500-3999g | 219 | 224 |
| 4000-4499g | 59 | 33 |
| 4500-4999g | 3 | 3 |
| 5000+ | 1 | 1 |
| Unspecified | 0 | 0 |
| | | |
| Average Birth weight (g) | 3262 | 3188 |

OUTCOME OF BIRTH

The number of live births for the second quarter of this year was 956 which accounted for 99.4% of the total births at a national level. The remaining 6 births were stillbirths. Stillbirths are defined as fetal death at or after 22 completed weeks of gestation.

Table 8 – Live and still births

| | <i>2nd Quarter 2012</i> | <i>2nd Quarter 2011</i> |
|--------------------------|------------------------------------|------------------------------------|
| Babies born alive | 956 | 941 |
| Stillbirths | 6 | 8 |

Of the --- live births this quarter, there were -- early neonatal deaths and -- late neonatal deaths.

Table 9 – Early and late neonatal deaths

| | <i>2nd Quarter 2012</i> | <i>2nd Quarter 2011</i> |
|------------------------------|------------------------------------|------------------------------------|
| Early Neonatal deaths | 5 | 4 |
| 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.

Table 10 – Infant feeding methods at time of discharge

| | <i>2nd Quarter 2012</i> | <i>2nd Quarter 2011</i> |
|------------------------------------|------------------------------------|------------------------------------|
| Breast only | 571 | 545 |
| Bottle only | 252 | 265 |
| Mixed (Breast & Bottle) | 127 | 127 |
| Other* | 12 | 12 |
| Unspecified | 0 | 0 |

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

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