



*NATIONAL OBSTETRIC INFORMATION SYSTEM (NOIS)*

WHO-OBSQID PROJECT, MALTA

*Second Quarterly Report: April to June 2001*

*COMPILED BY DR LINA JANULOVA MD, MSc.*

## **INTRODUCTION**

The new data recording and collecting system set up at the Main Public Hospital for the National Obstetric Information System (NOIS) has been operating smoothly due to the efforts and goodwill of all the staff involved. Consequently the transfer of completed NOIS sheets from the said hospital to the Department of Health Information has been timely.

## **ANALYSIS**

*This report analyses, the **national deliveries and births** that occurred in the second quarter of this year and compares it to the same period of last year, where possible (published summary report 2<sup>nd</sup> quarter 2000).*

*The data in this report relates to the birth for all maternities (Maltese and non-Maltese) registered into the system.*

There were a total of 966 deliveries registered in the Maltese islands for the second quarter of this year, which resulted in a total of 971 births.

When comparing these figures to the same period last year one can see that the number of deliveries and consequently the births decreased by 24 and 30 respectively (deliveries: 990, births: 1001-2<sup>nd</sup> quart.'00).

## **MATERNAL AGE, MARITAL STATUS, NATIONALITY and PARITY**

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 second 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% & 3%) occurred in the age group less than 15 years and 45 plus years. The minimum age of the mothers was 14 years while the maximum age was 45 years. The most frequent age at delivery was 27 years.

The grouped frequency distribution of deliveries according to maternal age are given in the table below

	<i>2<sup>nd</sup> Quarter 2001</i>	
<i>Age grp.(yrs)</i>	<i>Frequency</i>	<i>%</i>
<15	2	<1
15-19	63	7
20-24	214	22
25-29	362	37
30-34	217	22
35-39	76	8
40-44	26	3
45+	1	<1
Unspecified	5	<1

For the second quarter of this year, there were 12% (112) of all deliveries that occurred to mothers who were never married (single) while 88% (838) of deliveries occurred to mothers who were married once (married, widowed, separated). The remaining delivery had no marital status specified.

According to the data registered in NOIS, of the 12% (112) mothers who have never been married, 92% (102) received 'Support at home to raise the infant' while 8% (9) did not have 'support at home'. In the remaining mother this data was not specified. 96% (926) of all deliveries this quarter, occurred to women of Maltese nationality while 4% (40) were Non-Maltese

There were 50% (483) of mothers who were primiparas while 50% (483) were multiparas in the second quarter of this year. For the same period last year the primipara and multipara rate were 51%(507) and 49% (483) respectively.

### **MATERNAL LIFESTYLES**

There were 9% (85) of mothers who smoked either 1 to 3 cigarettes or more during pregnancy in the second quarter of this year. When comparing these figures to the same quarter of 2000, it can be seen that the smoking habits of mothers increased by 2% in this year's quarter (7% (66)-2<sup>nd</sup> quart. '00).

The table below gives the smoking, alcohol and drug habits of mothers for the first quarters of 2001 and 2000.

<i>2<sup>nd</sup> Quarters</i>	<i>2001</i>	<i>2000</i>
	No.	No.
<b><i>Cigarette smoking during pregnancy:</i></b>		
➤ 1 to 3/day	23	15
➤ >than 3/day	62	51
➤ Do not smoke	879	920
➤ Unspecified	2	4
<b><i>Alcohol consumption during pregnancy:</i></b>		
➤ Up to 1unit/day	1	1
➤ >than 1unit/day	-	2
➤ None	963	984
➤ Unspecified	2	3
<b><i>Drug Abuse during pregnancy</i></b>		
➤ Yes	-	8
➤ No	964	979
Unspecified	2	3

### **PATHOLOGY DURING PREGANANCY**

The table below gives the number of mothers for the first quarters of this year and 2000, recorded with a specific obstetric pathology during pregnancy. There were 4% of mothers who had gestational hypertention this quarter while for the same period last year this rate was at 7%.

<i>Pathology recorded during pregnancy</i>	<i>2nd Quarter 2001</i>			<i>2<sup>nd</sup> Quarter 2000</i>		
	<i>Yes</i>	<i>None</i>	<i>Unspec.</i>	<i>Yes</i>	<i>None</i>	<i>Unspec.</i>
	No.	No.	No.	No.	No.	No.
Antepartum Haemorrhage:	8	958	-	21	966	3
Gestational hypertention:	42	921	3	73	914	3
Pre-eclampsia:	3	963	-	6	981	3
Placenta praevia:	-	966	-	7	980	3
Abruption of plcenta:	3	961	2	6	981	3
Assisted fertilisation (ART):	3	963	-	13	973	4
Cardiovascular disease:	2	963	1	2	983	5

### *Diabetes in pregnancy*

*Diabetes in pregnancy is recorded into the standard NOIS sheet according to the data recorded in the 'Booking Sheet', 'The Baby Book' and the entry note by the doctor in the personal file of the mother.*

In the second quarter of this year, there were 2 mothers who were registered as being Insulin Dependent Diabetic before this pregnancy while there was 1 mother recorded with Non-Insulin Dependent diabetes. In addition, there were a total of 15 mothers registered with gestational diabetes, of these 1 was treated with insulin while the other 14 were controlled without the use of insulin.

### **ULTRASONOGRAPHY**

According to NOIS for the second quarter of this year, there were 36% (344) of mothers who had two ultrasounds carried out during pregnancy while 7% (66) had more than five scans. The table below gives the number and rate of ultrasound scan carried out during pregnancy.

<i>2<sup>nd</sup> Quarter 2001</i>		
<i>No of Scans</i>	<i>No.</i>	<i>%</i>
1	166	17
2	344	36
3	205	21
4	111	11
>5	66	7
Unspecified	74	8

### **CATEGORY OF MATERNITY ACCORDING TO DELIVERY**

For the second quarter of this year, there were a total of 961 (99.5%) singleton and 5 (0.5%) twin deliveries. When comparing these figures to last year's quarter for the same period one can see that the singleton deliveries decreased slightly (0.2%) this quarter while the twin delivery rate decreased by half (0.5%) (see table below).

	<i>2<sup>nd</sup> Quarters</i>	
	<i>2001</i>	<i>2000</i>
<i>Category</i>	<i>No.</i>	<i>No.</i>
Singleton	961	979
Twin	5	11
Triplet	-	-
Quadruplet	-	-

### **METHOD OF BIRTH**

In the second quarter of this year, there were 74% (720) of births that were delivered by vertex delivery, 23% (222) by emergency or elective Caesarean section and 3% (29) by assisted vaginal delivery (includes forceps, ventouse and breech).

When comparing the method of birth to last year's second quarter, it can be seen that the vertex deliveries increased by 3% while the Caesarean section births decreased by 2% this year (2<sup>nd</sup> quarter 2000: vertex: 714(71%), C section: 252(25%), assisted vaginal delivery: 35(4%).

	2 <sup>nd</sup> Quarters	
	2001	2000
Method of Birth*	No.	No.
Infants delivered by vertex delivery	720	714
Infants delivered by elective CS before labour	120	95
Infants delivered by emergency CS before labour	17	13
Infants delivered by elective CS during labour	7	4
Infants delivered by emergency CS during labour	78	140
Infants delivered by forceps	-	3
Infants delivered by ventouse	26	31
Breech deliveries	3	1

*Note: Data analysed according to total birth*

### **BIRTHWEIGHTS AND GENDER OF BIRTHS**

In the second quarter of 2001, there were 93% (904) of the total births (971) that occurred in the birth weight range of 2500g to 4999g. While 6% (54) of the total births were in the low birth weight range of 1500g to 2499g. The remaining <1% (8) of births were of very low birth weight (500g to 1499g). The remaining 5 births had no birthweight specified.

When comparing these birthweights to the same period last year, it can be seen that the birthweight range of 2500 to 4999g decreased by 2% this quarter while the low birth weight range (1500g to 2499g) increased by 2%. With regards to the very low birthweights (500-1499g) one can see that the rate increased twice as much this quarter. (see table below).

Birthweight(g)	2 <sup>nd</sup> quarter 2001	2 <sup>nd</sup> quarter 2000
<500g	-	1
500-1499g	8	3
1500-2499g	54	43
2500-4999g	904	953
5000+	-	-
Unspecified	5	1
Average Birthweight	3244	3295

The male and female distribution of births in the second quarter of 2001 was 494 and 477 respectively.

### **OUTCOME OF BIRTH**

The number of live births for the second quarters of this year and last year were 965 and 996 respectively which accounted for 99% of the total birth rate at a national

level. The remaining 1 % accounted for the stillbirths and the neonatal deaths (see table below).

Outcome of Birth	2 <sup>nd</sup> quarter 2001	2 <sup>nd</sup> quarter 2000
Babies alive after 28 days	965	996
Stillbirths	4	3
Early Neonatal deaths	2	1
Late Neonatal deaths	-	1

#### ***BREAST FEEDING WITHIN 30 MINUTES OF DELIVERY***

In the second quarter of this year there were 46% of infants that were breast fed 'within 30 minutes of birth' while 53% were not breast fed during the same time period. The remaining 1% of births had no information recorded regarding the breast feeding habits within 30 minutes of delivery. When comparing these figures to last years second quarter, one can see that there was a 12% decrease in the number of infants who were breast fed 'within 30 minutes of birth' in this years second quarter (2<sup>nd</sup> quart. 2000: 58% breast fed, 42% not breast fed.)

Breast feeding within 30mins. of delivery	2 <sup>nd</sup> quarter 2001	2 <sup>nd</sup> quarter 2000
	<i>No.</i>	<i>No.</i>
Infants breast fed	445	578
Infants not breast fed	514	421
Unspecified	12	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 from the numbers given below as these may change soon after discharge from the birthing facilities.

Infant feeding methods at time of discharge	2 <sup>nd</sup> quarter 2001	2 <sup>nd</sup> quarter 2000
	<i>No.</i>	<i>No.</i>
Breast only	494	557
Bottle only	355	316
Mixed (Breast & Bottle)	101	106
Other	8	-
Unspecified	13	22

#### ***CONCLUSION***

Following the introduction of NOIS at a case-based level in the beginning of 1999, the Department of Health Information has requested the National Statistics Office, Malta to incorporate NOIS under the Statistics Act, Malta.

Once again, WHO-EURO is holding 'The Seventh Workshop for quality development in perinatal care; the OBSQID project in Central Europe' in November of this year. Malta through NOIS was invited to present it's 'Experiences in data collection and comparison to improve the quality of perinatal care: Progress and implementation reports.

